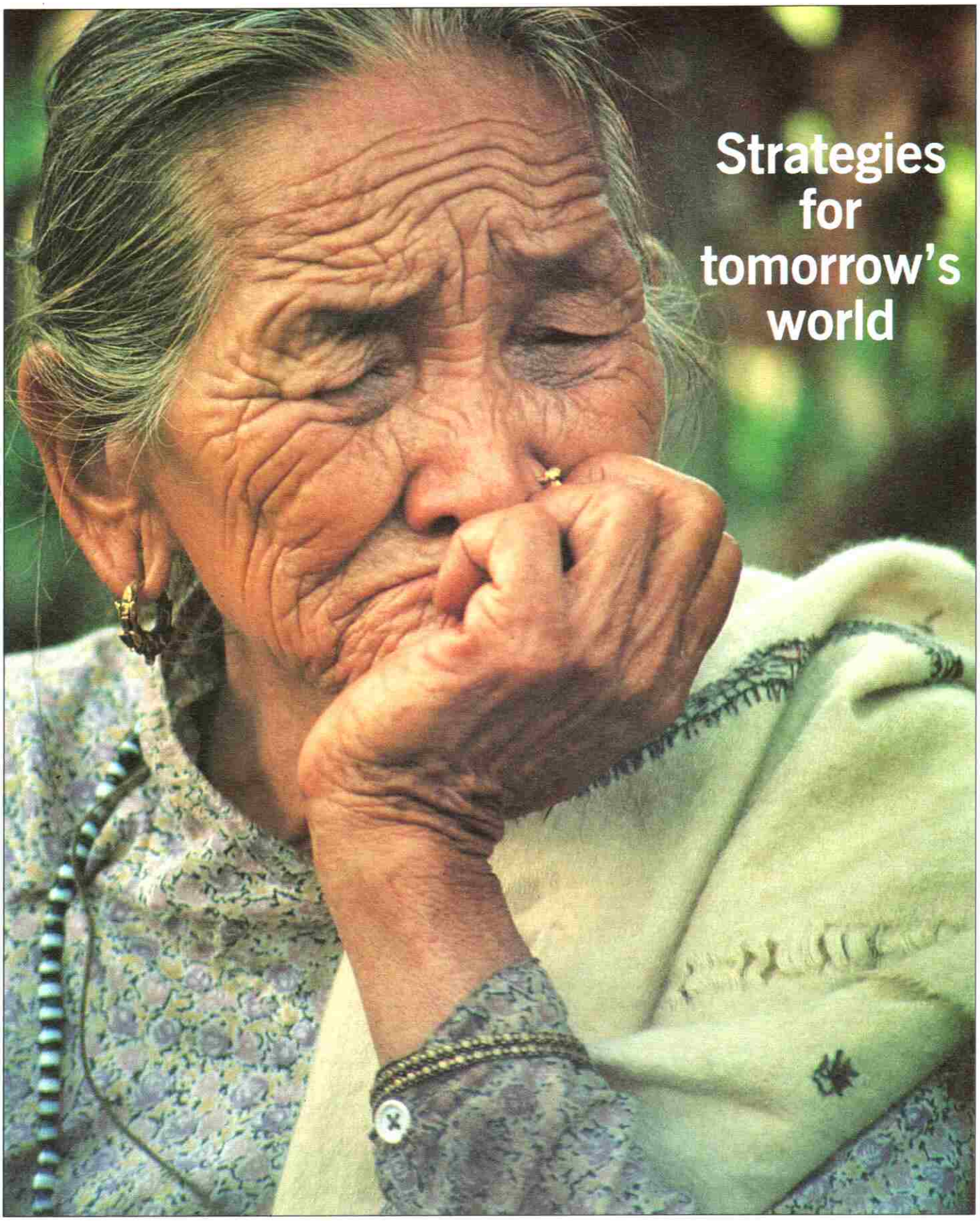
People & the Planet

IPPF, UNFPA, IUCN

Vol. 2 No. 4 1993



Strategies for tomorrow's world

Partners for change

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Cover: *An elderly member of the 'users group' in Bhorletar, Nepal. (See page 14).*

BIKAS RAUNIER

■ ***The next issue of* People & the Planet *reports on the crisis facing our coasts – and how people are fighting back.***

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People & the Planet is published quarterly by Planet 21, 60 Twisden Road, London NW5 1DN, UK, telephone (+4471) 485 3136, fax 267 0874.

Subscription/Editorial Services: IPPF, Regent's College, Inner Circle, Regent's Park, London NW1 4NS, UK, telephone (+4471) 486 0741, fax 487 7950, telex 919573.

Annual subscription: US $20/£12 or £10 (UK only) including postage, payable to Planet 21 at Publication Sales, IPPF.

ISSN 0968-1655

Printed in England on paper made from bagasse (sugar cane waste) and about one-third softwood pulp from sustainably managed plantations, by The Lavenham Press Ltd.

People & the Planet

Confounding the cynics

It is easy to be cynical about national planning. Many bureaucracies, in the North and South, have shelves of economic and environmental plans gathering dust. And didn't the idea of comprehensive strategic planning fall with the Berlin Wall? So why this rush into 'sustainable development strategies'? And can they work?

The reason for the new enthusiasm is easiest to answer. The world is changing fast. Its problems involve horrendously complex, inter-related social, environmental and economic challenges. This, plus a new awareness about the needs of more numerous future generations and the reality of global inter-dependence, demand a more systematic and integrated approach than market forces alone can handle. That, certainly, was the message of Agenda 21, at Rio.

So can such strategies break new ground? As perceived by IUCN, IIED and others, national sustainable development strategies differ from previous planning exercises in crucial respects. In their many variations, they are processes which put more emphasis on participation, comprehensiveness, integration, the long-term view and on the external factors which are needed to empower national action, such as trade, debt and financing. They aim to tackle the deep-rooted structural and institutional problems which are preventing countries from achieving a long-lasting quality of life, based on policies which are socially desirable, economically viable and ecologically sustainable.

Such an aim, it is recognized, is profoundly difficult and demanding. But can strategies help? The reports in this issue from Nepal and Canada, in particular, show some of the potential and many of the problems. In Nepal, there is a huge gap between paper and practice, largely caused by a weakness in institutional capacity in a very new democracy. But there is also hope in the direction being taken both at the centre and in many local initiatives. In Canada, too, useful lessons are being learned about the value and ways of improving participation in planning for a sustainable future.

Of course, strategic planning may become top-down, inflexible, burdensome and prescriptive. It may fail to challenge power structures and vested interests. It may, as our opening article warns, be misused by donors. It is a long and difficult road for those concerned with social issues such as health and family planning, to work comfortably with the conservationists or the economic planners. Strategic planning may fail to work in a recession-bound world of self-interested political institutions and an uninterested public.

On the other hand, there is no future worth having if communities and local and national governments do not work together to sustainably develop resources, improve the health, housing and education of the people and protect the natural world. There are no quick fixes, but in the best of all possible worlds, sustainable development strategies do have the potential to complement and support successful community-driven initiatives, to encourage innovation in governments and even inspire flashes of progress in the multilateral system.

John Rowley

NEWS FILE

Wetlands Convention

The fifth meeting of the Contracting Parties to the Ramsar Convention on Wetlands, in Kushiro, Japan, in June, was a considerable success, *writes Dwight Peck.*

With 1,200 representatives from 72 member states, 23 observer states and 104 non-governmental organizations, there was renewed commitment to the conservation and wise use of wetland resources. This was seen in the significant budget increase from SFr1.l million to SFr2.2 million for the next triennium and an ambitious programme for the Parties and the Ramsar Bureau.

At the same time, the allocation to the Wetland Convervation Fund, which acts as a catalyst in helping developing nations develop their plans, was increased tenfold to SFr100,000.

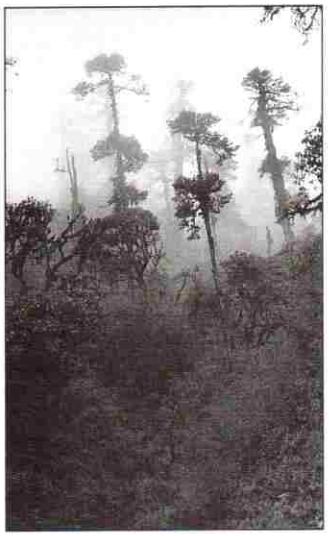
There was major emphasis on the newly adopted guidelines for the wise use of wetlands. These were based on the general agreement that as world population grows, more and more pressure is being forced on fragile wetland resources and that it is now urgently imperative that people everywhere, in developed and developing countries, cooperate in finding ways to benefit from the wetlands while taking care to preserve their potentials for the future.

Some encouragement can be taken from the the fact that there were 25 new Contracting Parties to the Convention since the last meeting in 1990 and that two more states joined even as the conference was in progress. However, many of the signatory states have made little concrete effort to develop national strategies for curtailing the loss of wetland resources.

As the 'Kushiro Statement', adopted at the meeting, made clear, to a very large exent the health of nations depends on the welfare of their wetlands.

■ *Contact: Ramsar Bureau, rue Mauverney 28, CH-1196 Gland, Switzerland. Fax: +4122 999 0169.*

Saving Bhutan's forests



The South Asian Kingdom of Bhutan has launched a multi-million dollar national plan to save its forests by matching forest use to community needs. Large areas will be earmarked for total protection while other areas are to be set aside for commercial and local management, including rehabilitation and replanting.

With a population of 1.4 million, growing at 2.4 per cent a year, Bhutan is attempting to plan for the future and to avoid the fate of the forests in the neighbouring countries of India and Nepal.

The World Bank, which is co-financing the project with the Swiss Development Co-operation agency, reports that the growing population is already inching into the forests, particularly in the densely-populated eastern provinces.

The project, estimated to cost $8.9 million, will be launched first in the east, to see if the dual objectives of forest protection and of satisfying rising domestic and commercial demands can be met. It will then become a model for the rest of the country. At present 98 per cent of Bhutan's total domestic energy needs are met by fuelwood.

Food for the future

A world where regions, households and individuals are to be secure in their food needs in the year 2050, would require food production at least three times greater than at present if the demands of a growing population are taken into account. And most of the extra food will have to be produced in the developing countries.

That was the conclusion of a presentation to the inaugural Oxford University Environmental Conference, in July, which looked at Climate Change and World Food Security.

Robert Kates and Robert Chen of Brown University in the United States said that climate change was likely to make things more difficult, but that there would be major regional differences.

Pierre Crosson and Jock Anderson, from Resources for the Future and the World Bank, warned that only about a fifth or a quarter of the 1.5 billion hectares of land now in forest, pasture or range with a potential for crop production, could be converted to grow crops at an acceptable economic or environmental cost – projections that were seen as very optimistic by some other experts. But even then much of the potential cropland is in Africa and Latin America, while much of the demand for food will come from Asia.

They said that while the World Bank estimates suggest that irrigated land could potentially be expanded by 50 per cent, the environmental costs mean that the real potential is considerably less. Population, in the meantime, is expected to more than double.

They conclude that whether food needs can be met at an acceptable cost will depend on an expansion in knowledge about agricultural production embodied in people, institutions and technology, rather than on an increase in the supply of natural resources.

Costs of climate change

The conference was presented with various estimates of the effect of climate change. Martin Parry and others from the Environmental Change Unit at Oxford, reporting on a study commissioned by the U.S. Environment Protection Agency, said that without farm-level adaptation climate change would reduce world cereal production by between 1 and 7 per cent by 2060.

The study, by 50 scientists in 18 countries, concluded that the biggest drop would be in developing countries, with an average reduction of between 9 and 11 per cent. In developed countries production would go up under all but the most severe climate change scenarios. These figures allow for medium population estimates, trade liberalization, moderate economic growth and improvements in technology.

MARK EDWARDS: STILL PICTURES

They also take into account higher prices and the reclamation of additional arable land.

Cereal prices could go up by between 25 and 250 per cent and the numbers of people at risk from hunger could go up from 640 million to between 700 and 1,000 million. Martin Parry added that new estimates, based on a lower figure for the increase in global warming of 1.5 degrees centigrade by the middle of the next century, were now being prepared.

Stephen Schneider from Stanford University said that given the rapid rate at which humans were transforming the land and changing the composition of the air, other surprises may be in store.

These include rapid changes in ocean circulation patterns, increased storm strength, intensified drought and floods, new opportunities to grow crops fertilized by CO_2, altered patterns of wild fires and rapid species extinction. Social changes might include the creation of many more environmental refugees or a breakthrough in renewable energy systems which might mitigate one of the prime causes of global warming.

All this, he said, called for an expanded focus on inter-disciplinary scientific and policy analysis.

■ *See also* Climate Change and World Food Supply, *Environmental Change Unit, Oxford University, UK.*

Commonwealth education

Environmental education is fairly well established in some of the 50 countries which make up the British Commonwealth, including Britain, Canada and Australia, but most of them do not possess any systematic means by which environmental awareness can be passed on in schools or to the public.

To discuss how this can be corrected, the University of Bradford in England, hosted an international conference last July involving over 80 government officials, academics, teachers and NGOs from 37 countries and five continents.

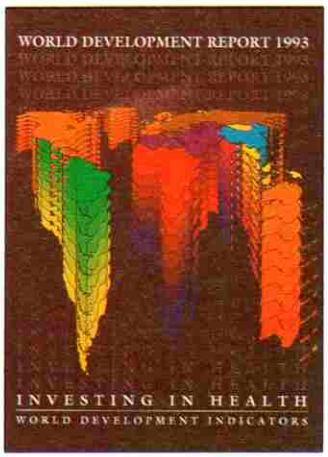
The conference saw the launching of a new book on *Environmental Education in the Commonwealth* published by the Canada-based Commonwealth of Learning. It also agreed on a Declaration on Priorities for Environmental Education in the Commonwealth which was delivered to Commonwealth Heads of Government when they met in Cyprus.

A Commonwealth Environmental Education Network has been started and the Research Unit on Environmental Education and Development at Bradford has set up a special programme for the ACP-Commonwealth countries. Follow-up seminars will be held in each Commonwealth country.

■ *Contact Dr Walter Leal Filho, Department of Environmental Science, University of Bradford, Bradford BD7 1DP, UK for conference proceedings.*

'Investing in Health'

Although "health conditions around the world have improved more in the past 40 years than in all of previous human history", enormous health problems remain, according to 'Investing in Health', the 1993 *World Development Report* published



by the World Bank.

The Report says that some 43 per cent of the burden of disease in Sub-Saharan Africa is due to complaints which could be cheaply prevented and cured.

Applying a 'cost-effectiveness' criterion, the Report suggests governments should spend less on prestigious and expensive hospital facilities and concentrate their funds and efforts on expanding immunization services, school-based health services, campaigns to reduce the level of smoking and alcohol consumption, information about nutrition and family planning, and efforts to prevent the spread of AIDS. Such efforts would work best if accompanied by broader efforts to reduce household poverty in the poorest countries and improve education, especially for girls.

The Bank, which claims to have quadrupled its lending for health over the past six years to $1.5 billion, also emphasizes the importance of promoting diversity and competition in the supply of health services. However, it does not address the criticism that its structural adjustment programmes have led to worse health for the poor: Christian Aid suggests that Zimbabwe's Structural Adjustment Programme, which introduced cost recovery and reduction in health services, has led to increased maternal mortality rates because fewer women can afford clinic attendance.

■ *World Development Report 1993: Investing in Health. Oxford University Press for World Bank.*

New head for UNDP

"The gravest challenges facing the developing world today are widespread poverty and environmental deterioration. The two are linked; they reinforce each other in a tragic downward spiral, and both are exacerbated by mounting population pressures," said James 'Gus' Speth, the new Administrator for the United Nations Development Programme (UNDP).

Speth, who has replaced William Draper III, is advocating the "new model of development", which not only generates economic growth, but distributes its benefits equitably, sustains environmental resources for the future and empowers people to participate in the economy and the decisions that affect their lives. He defines sustainable human development as providing maternal and child health care, elevating the status of women, and providing the poor with vastly greater educational and economic opportunities.

Speth founded the World Resources Institute in 1982 and was a senior adviser to President-elect Clinton's transition team on environmental issues.

China to ban unreliable IUD

After years of hesitancy, due to financial and manufacturing problems, the Chinese Government has finally moved to replace the steel ring intrauterine device (IUD) with the Copper T.

The steel ring, used by some 60 million women, has been pronounced unreliable by the World Health Organization and is blamed for some 30 per cent of the country's 10 million annual abortions. It will no longer be manufactured.

China has received financial and technical assistance from the United Nations Population Fund (UNFPA) to establish two factories to produce the Copper T 220 and next year it will expand this capacity, as well as starting production of the Copper T 380-A.

The introduction of the newer IUD is likely to prevent the following events during the next 10 years: 55,600 pregnancies, 18,400 live births, 35,600 induced abortions, 16,300 maternal deaths, 365,000 infant deaths, and 28,800 child deaths. The cheaper IUD was used by more than 40 per cent of Chinese women using modern contraception, making it the country's most common contraceptive method.

Quote

"There is no reason to install flush toilets in parts of the world suffering water shortages. Instead, we have to make dry alternatives attractive. It must become prestigious to sit on a dry toilet." *Dr Poul Harremoes, addressing the Stockholm Water Symposium, earlier this year.*

Learning to care for the people

Over the last quarter of a century, the world has been urged along the path of what is now called 'sustainable development'. In recent years all sorts of international and national and local strategies to bring that goal nearer have been drawn up. Here *Jeremy Carew-Reid*, of the World Conservation Union, reviews the progress made in developing and carrying out such strategies.

While working to support isolated village communities in the mountains of Nepal, IUCN found the minutes of local council meetings going back more than 100 years which recorded agreed strategies for the conservation and use of natural resources. Strategies are not new, but today's heightened levels of uncertainty and change call for greater emphasis on sustainability and co-operation.

Population growth and limited natural resources are leading to increasing national and local competition in resource use. Local communities are seeking to manage their environment for self-reliance while national and international imperatives require this to be achieved within broader management frameworks.

International approaches to strategies for sustainable development have evolved in three broad stages leading gradually to greater emphasis on local initiative. For some 10 years from the early 1970s, the effort was concentrated on developing international strategies to tackle common problems such as population or human settlements. This was the time of the mega-conference. The decade from the early 1980s saw the international effort overlaid by a growing interest among governments of both north and south in strategies at a national level.

By the end of 1993, close to 100 countries will have embarked upon some form of comprehensive national strategy process, all reaching for a cross-sectoral relevance and impact. The decade to come will be dominated by the need to build capacities to institutionalize and refine these processes with growing attention to the sub-national or local level, for that is where actions take effect. Each level continues to be important in building the global strategic framework for sustainable development.

Much of the work on international strategies followed the first global conference on the human environment in 1972 and the creation of the United Nations Environment Programme (UNEP). For example, some of the most difficult issues faced in the Law of the Sea negotiations related to environmental protection and many of these were picked up and addressed by UNEP's Regional Seas Programme. Within 10 years, 130 countries from 11 neglected regional seas worked to develop strategies for their shared environmental problems, and to give the entire legal process expression through regional conventions.

This and other international efforts to nurture co-operative management of common resources have been limited by each participating country's ability to act. But governments have undertaken a growing range of international obligations and have needed to express these in umbrella national strategies.

National strategies

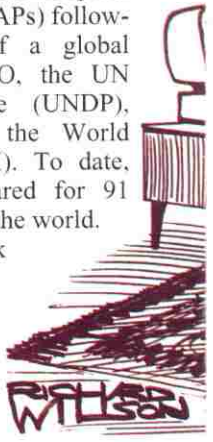
Initially, countries took their lead from the World Conservation Strategy (WCS) prepared by IUCN in collaboration with UNEP and the World Wide Fund for Nature (WWF). The WCS promoted the preparation of national conservation strategies (NCS) and for the first half of the 1980s this concept, based on a process of consensus building, was the main guiding force in national attempts to reconcile conservation with development. By 1985, some 30 countries had embarked on a NCS process, largely in isolation and many with assistance from IUCN, which was learning as it went along.

The World Commission on Environment and Development which ran from 1985 to 1987 reinforced the value of national strategic approaches and led to a second wave of initiatives. What was sinking in during this period was the need for a new, strategic, intersectoral approach to managing change which recognized the weaknesses of economic planning and the failure of piecemeal environment protection policies to address them.

At this time, a number of international organizations came on the scene with a variety of thematic strategies for selected countries – and greatly complicated the situation. Until then, strategies had been largely independent initiatives of governments or national groups proceeding at a pace and pattern best suited to them.

From 1985 onwards, the United Nations Sudano-Sahelian Office (UNSO) for Africa supported the preparation of National Plans to Combat Desertification in response to a global action plan on drought. A year later, the Food and Agricultural Organization (FAO) began sponsoring the preparation of National Tropical Forestry Action Plans (TFAPs) following the development of a global forestry strategy by FAO, the UN Development Programme (UNDP), The World Bank and the World Resources Institute (WRI). To date, TFAPs have been prepared for 91 countries in all regions of the world.

In 1987, the World Bank began assisting four pilot countries in Africa in the preparation of National Environment Action Plans (NEAPs). By 1991, some 10 additional



NEAPs had been started in response to an internal World Bank directive requiring action plans as a precondition to the least developed countries receiving World Bank loans. In 1992 this directive was reinforced with greater precision and expanded to cover all 110 of the Bank's borrower countries. By June 1993, the Bank estimated that 50 countries had embarked on some form of NEAP process.

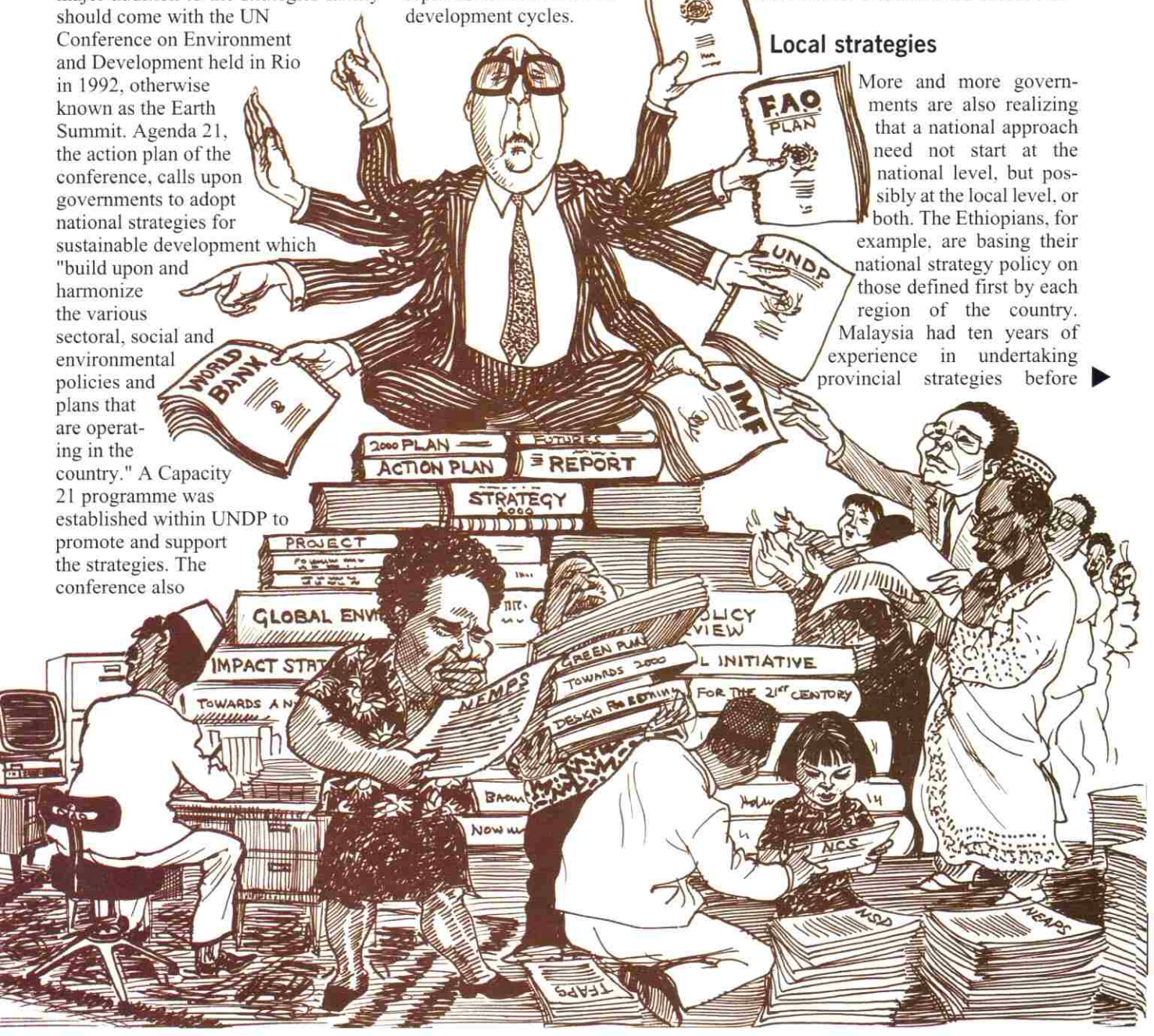
It was appropriate that the next major addition to the strategies family should come with the UN Conference on Environment and Development held in Rio in 1992, otherwise known as the Earth Summit. Agenda 21, the action plan of the conference, calls upon governments to adopt national strategies for sustainable development which "build upon and harmonize the various sectoral, social and environmental policies and plans that are operating in the country." A Capacity 21 programme was established within UNDP to promote and support the strategies. The conference also launched the conventions on biodiversity and climate change which both call for national plans to meet the obligations and principles that the conventions embrace.

A number of 'national strategies for sustainable development', such as those in the Philippines, Indonesia and Thailand have been launched, but none yet truly encompass ecological, social and economic concerns in a way which satisfactorily replaces the conventional development cycles.

The labels in this smorgasbord of strategies – for example, NCSs, TFAPs, NEAPs, NSDs, Green Plans and NEMPs (National Environment Management Plans in the South Pacific) – imply that each is a distinct entity. In practice, this is not so. There is a great diversity within each type and overlap between them. Yet, one can safely generalise that those strategies which have departed from the original model to express true national identity have tended to be the most successful.

Local strategies

More and more governments are also realizing that a national approach need not start at the national level, but possibly at the local level, or both. The Ethiopians, for example, are basing their national strategy policy on those defined first by each region of the country. Malaysia had ten years of experience in undertaking provincial strategies before ▶



embarking on a national strategy. In Pakistan, on the other hand, the NCS process is deepening to include strategies for each of the provinces, as it is for districts in Tanzania and Uganda.

Indeed, while a trickle down to local levels has been occurring over the past two decades, there has been an upwelling of experience from local communities. This rich local experience has grown from a wide variety of situations. Some strategies originate from indigenous communities independent of government while others, involving broad co-operation between government and community, have grown from new approaches to protected area and buffer zone management and river basin planning, for example. Strategies for sustainable development have been evolving at local level, often in isolation and despite inhibiting influences of centralized government.

Because change may often come from forces outside of local control, strategy processes should be interlinked from different levels. The political decisions made locally need to be tempered and guided by national and international principles of sustainability. And this recognition that local areas are part of larger systems and cannot function in isolation should be balanced by growing forces of devolution in government.

In summary, there has been a rapidly changing situation over the past two decades, particularly in the last five years. This has seen an increase in the number and type of strategies; an increase in the number of actors external to the countries concerned; increasing significance of strategies as a key element in development assistance; and, more slowly, a recognition of strategies as an essential part of the overall move towards sustainable development.

Yet, the increasing influence of external forces, often operating at the same time within a country but supporting different and unco-ordinated strategy initiatives has led to considerable bewilderment in many developing countries. It has caused a diversion of existing capacity and an undermining of local initiative. It has resulted in a massive waste of international and national resources, and, all too frequently, a loss of momentum in areas of environmental policy to which governments were already committed.

This growing sense of chaos has to be considered alongside all the other very real obstacles in the way of putting sustainable strategies into action. Governments are often moribund, politically hard pressed and open to short-term pressures of all sorts. Corruption is common and the immediate need to address unrest and the problems that breed on poverty may be overwhelming. But the dangers of short-termism are becoming very apparent in all societies. Many countries are now making some progress towards a sustainable future, often as a result of local initiatives. The right strategies have a key role in giving that progress impetus and direction.

Principles

Over the past year IUCN's strategy networks have examined more than 40 strategies, local and national. They distilled the following broad principles:

- Strategies are concerned with the flowering of development options which are socially desirable, economically viable and ecologically sustainable.
- They involve continuous creative effort which is as much part of the desired qualities of development as the more tangible specific ends which change over time.
- Strategies should be participatory. They should devolve and decentralize authority and facilitate the empowerment of disadvantaged groups.
- Strategy processes should mediate and build consensus between conflicting interests in resource use and, in doing so, seek equitable outcomes.
- Strategies should provide for the co-ordination and integration of effort between communities, between sectors and between governments by cutting across conventional boundaries in society. This requires that they be flexible and adaptive, innovative and opportunistic and retain the capacity for learning and reflection.

Most of these principles are concerned with the way people interact with one another, and their sense of how they can control the forces which shape their environment. They acknowledge that, to care for the earth, strategies for sustainable development need first to better care for people. ■

Jeremy Carew-Reid was IUCN's representative in Nepal for several years. He is now Director of Conservation Services at the Union's headquarters in Switzerland, which include environmental planning and assessment of programmes.

Donors on tap – not on top

Concern about the role of donors as manipulators of national and local strategies, rather than facilitators, has recently come to a head for two reasons. First, the multiplicity of donors supporting different initiatives in countries which don't have the capacity to co-ordinate them has grown. Secondly, environmental conditions are being tied to the receipt of grants and loans.

The problem of too many players has frequently led to more money than can be absorbed, a glut of expatriate consultants, and a wide range of activities run by staff with salaries and resources which set them apart from the institutions with which they are trying to work.

Donors can be an essential and creative force, stimulating governments and communities to re-think options and ways of managing change. But they need to work in a way that is appropriate to local conditions and to build upon existing initiatives. Organizations such as the World Bank, which are not best suited to working on the ground in this way, need to form partnerships with those that are.

The following lessons for donors have been learned:

- **Governments must be supported in taking a leading role in co- ordinating contributions to the strategy process.**
- **Conditions on aid, when applied, should respect alternative approaches to strategies which are started locally.**
- **Donors should forget about 'model' strategies and support tailor-made solutions.**
- **Low-level, continuous external backing over a long period is almost always much better than short, high level, one-off inputs.**
- **A continuous dialogue with donors is essential.**
- **Donors must support the capacity-building process and not just the products of strategic planning.**
- **Donors and governments need to refocus existing investments in all sectors, as well as financing new ideas which promote self- reliance.**
- **Donors should help develop indicators for sustainability.** ■

Seven key lessons

In the last few years, so many agencies have been falling over each other to assist in strategies that coordination has become essential. Bodies such as the World Conservation Union (IUCN), the International Institute for Environment and Development (IIED) and the World Resources Institute (WRI) have been working to distil the lessons that have been learnt. IUCN has set up regional networks with people experienced in strategy-making in Asia, Africa and Latin America to help this process. So what has been learnt? Here, in summary are some of the answers.

1 *Strategies are not one-off events.* **They should rather be action-based, building on priority areas where government and people are already committed. Politicians and local communities need to see the benefits and relevance of the strategy process. And all the elements of it – information gathering, policy preparation, action planning and implementation – must continue together and reinforce one another.**

2 *Strategies should be seen as a continuous, cyclical process and integrated into conventional development cycles.* **They are not just something to be 'added on'. Some examples come from Ethiopia, Seychelles, the Netherlands and Norway.**
In Ethiopia, the National Conservation Strategy secretariat is working closely with the UNDP's five-year support programme and the World Bank-promoted Public Investment Portfolio. In the Netherlands the strategy has led to structural changes in production and consumption. In Norway, it has resulted in a decision that each Ministry must now provide estimates of the environmental effects of all proposed spending. And the Seychelles has probably gone further than any country in providing the appropriate institutional context for meshing environment and development in national planning by setting up a Ministry of Environment, Economic Planning and External Relations as part of its National Environment Management Plan.

3 *Successful strategies are not possible unless the capacity to carry them through is built up at the earliest stage.* **At a national level this means building the capacity for cross-sectoral action, finding ways of integrating environmental concerns with development, and developing processes to alert government agencies and the private sector about their environmental responsibilities. In Nepal this has been done by training key technical staff from various Ministries in environmental impact assessment, an activity which led to the setting up environmental units in key Ministries and an Environmental Protection Council.**
Capacity building is as much about weakening bad institutional practice – frequently authoritarian, centralised and isolationist – as it is about strengthening institutions, for example, by strengthening cross-sectoral links.

4 *Centralized planning and decentralized implementation don't mix.* **Greater emphasis needs to be given to devolution is countries where the centralizing forces have failed to nurture the local level. In Ethiopia, for example, where environmental information is passed on locally by word of mouth, strategies will have to reflect local diversity.**

5 *Participation needs to increase as a strategy develops.* **In many cases local involvement is at first selective, and focused on representative communities. But in Nicaragua, for example, the national conservation strategy process involved all 143 municipalities from the start, and still does. In poor local communities strategies may first need to identify and meet immediate needs, so that benefits can be felt.**

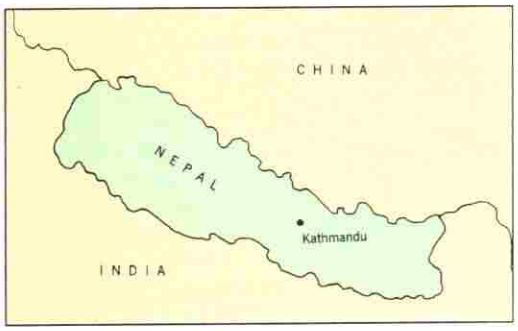
6 *Strategies need to be processes of action and reflection.* **This means that monitoring and evaluation are vital. The appraisal of strategies needs to stress the way things are done as well as the outcome, they need to anticipate the future and they need to be action based. This works best at a local level where the benefits of reflection and feedback become immediately obvious to the participants in terms of development.**

7 *Donors need to operate at a level appropriate to local conditions, and to build on local initiatives.* **If every external input has not resulted in increased local capacity, something is wrong.**
(See box opposite).

Nepal: 'a problem of governance'

Nepal, one of the poorest nations on earth, suffers no shortage of plans. It has a population policy. It has plans for forests, irrigation and horticulture. Its National Conservation Strategy published in 1988 took five years to develop. It is now on its 8th Five Year Plan. Most recently this year, at the behest of the World Bank, it launched a National Environment Policy and Action Plan. But its people get poorer, its forest cover declines, its capital Kathmandu is now the most polluted place outside of Mexico City. What is going wrong? Our correspondent, *Binod Bhattarai*, reports from Nepal.

N. CAREW-REID



"Our capital is the people. We don't have machinery, and we don't have financial capital; we have labour. So we have got to motivate our people for development purposes."
B.P.Koirala, former prime minister of Nepal.

Still weathering the pangs of political transition – from a 30-year-old, autocratic one-party state to a Western-style democracy – Nepal is at the crossroads between a sustainable future in which its fragile mountain environment is in balance with its growing population, and the present inertia.

In terms of planning, the country has complemented the National Conservation Strategy (NCS) in 1988 with the National Environmental Policy and Action Plan published in August this year. But attaining sustainable development remains an up-hill task.

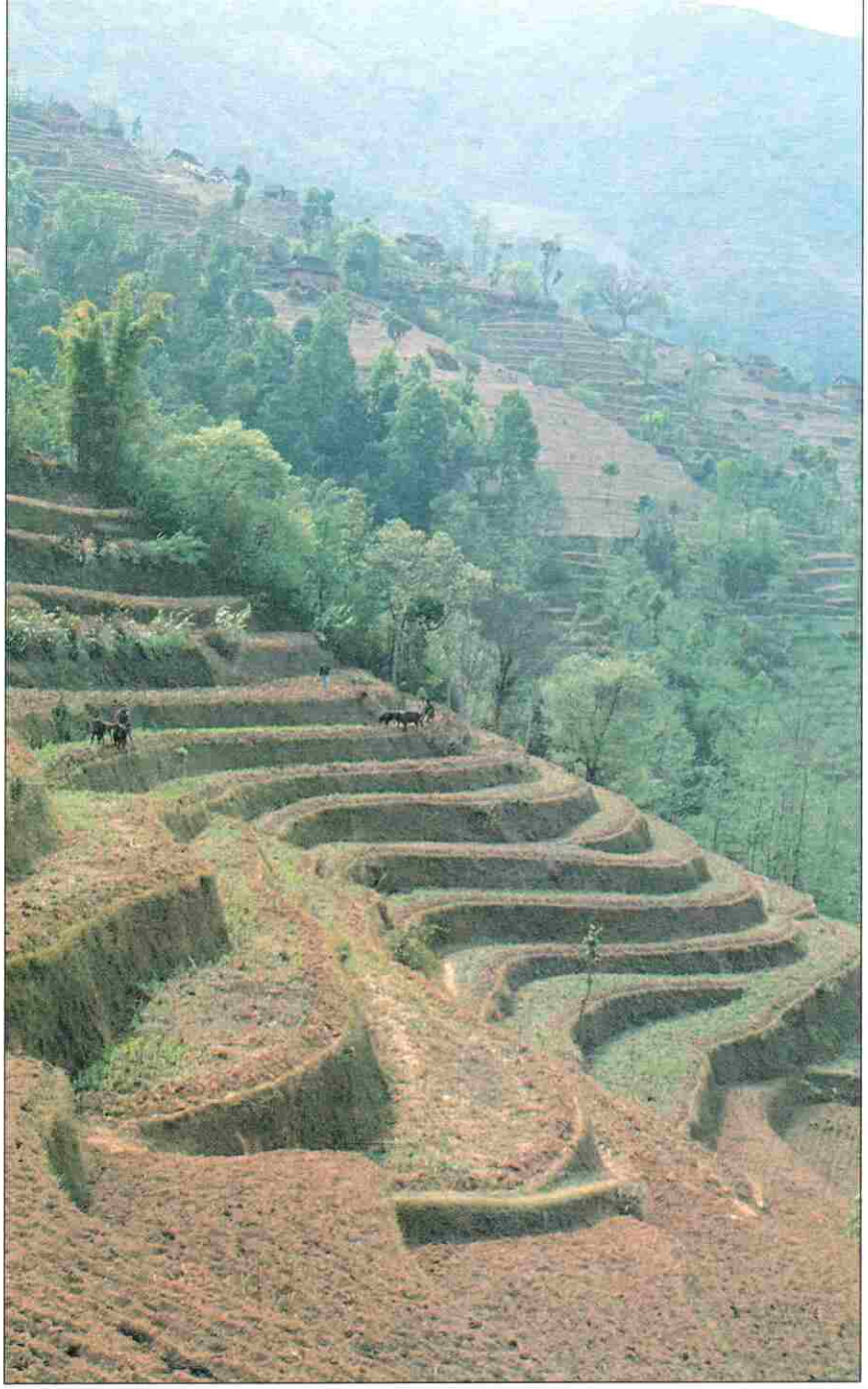
Nepal is faced with twin challenges. On the one hand it has a backlog of problems inherited from the past. On the other, is a long list of new aspirations. The challenges are seemingly insurmountable, but because the political change of April 1990 sets the stage for new thinking, there is some room for optimism and hope.

True, the new Nepali leaders, who spent most of the productive years of their lives in exile, may lack the necessary experience in governance. True, that with so many competing problems, it would be difficult for anyone to know where to start. Yet because democracy brings debate, there is reason to hope that this will eventually lead to meaningful development.

Unfortunately Nepal's 'touristic' postcard image has veiled many of its real problems.

Nepal's 18.5 million people have a per capita income of US $170, which ranks it ahead of only four of the world's poorest nations. This national average also reflects only the relative affluence of the rural and urban elites. Over 70 per cent of Nepalis live in absolute poverty, or with average per capita incomes of less than $100. And village Nepal is getting poorer despite increasing international aid which makes up 60 per cent of the development budget.

The maternal mortality rate – which serves as a key indicator of human



JEREMY CAREY-REID/IUCN

Far left: *Vegetable market in Kathmandu: population growth has already outpaced crop production.*
Left: *Cultivation on narrow steep terraces is indicative of land shortage.*

suffering – is one of the highest in the world (850:100,000). Nepal is also one, among three countries in the world, where life expectancy of women is lower than that of the men. There is one doctor to serve about 30,000 Nepalis, and 90 per cent of all births are not attended by a trained practitioner.

The population, which is growing at 2.1 per cent each year, is on course to double in 30 years. This growth rate has already outpaced crop production, even though 90 per cent of the people depend on agriculture for subsistence. Increasing population has led to increased competition for the limited supply of land (only 15 per cent of which is arable), forest products, clean water and other natural endowments. All these realities, collectively add about 250,000 people to the number of Nepal's absolute poor every year.

Other, more visible signs of stress are the stripping of forests on the plains of the Terai, the balding of some mountain slopes and the declining density of tree cover in many parts of the middle hills – though the scale and nature of deforestation is now a matter of some dispute.

Development 'planning' began in Nepal in the mid-1950s. Most of these plans were prepared at the centre and sent to the districts for implementation. The districts then instructed the villages, which in turn asked the people to try them out. This has changed little, and even today most of the Nepali villagers still 'look up' for development.

The major challenge is to unlearn the lessons of centralized development. "Planning at the centre has reached the level of sophisticated NCS and NEPAP strategies, while development thinking in the village remains at the level of obtaining grants to buy corrugated sheets for roofing schools and pipes for drinking water systems," says Anil Chitrakar, a young Nepali activist who runs conservation awareness camps for school children.

An overwhelming infrastructure bias still characterizes the approach of government ministries, despite the lip-service to 'poverty-alleviation' and 'equity' in the planning documents. "Or else how does a project with so many economic and environmental uncertainties like Arun III pass all of these plans?" Chitrakar asks.

This $764 million hydro electric project is a major investment, and Nepal plans to begin construction next year. This project, activists say, will 'crowd out' inputs to the social sectors. The crowding out effect is already apparent in the water sector. The government's 1993/1994 budget, for example, allocates about $17 million to Arun III, while less than $0.1 million has been kept aside to fund detailed feasibility studies for other projects. It is only a matter of time before other sectors start to feel the crunch, according to Chitrakar.

Nepal, on paper and to some extent in practice, is already implementing two major plans: the NCS is well into its third phase of implementation and the eighth Five-Year Plan is in its first year. These incorporate a population policy drawn up in the early 1980s. Additionally four sectoral master plans in forestry, irrigation, livestock and horticulture, are in different stages of execution. Now, at the behest of the World Bank, it has its NEPAP. (The Planning Commission insisted on adding the extra P for policy, since it wished this document to be all-embracing).)

"We wanted to have one all purpose document that will serve as a conservation plan, an Agenda 21 plan and an Environmental Action Plan," says Dr Ram Prakash Yadav, a Member of the National Planning Commission, whose responsibilities include environmental policies.

He told *People & the Planet* that NEPAP was a condition of receiving the World Bank IDA funds. But, in the form Nepal insisted on, it had proved a "very useful exercise" linking together environment and development, with specific action points which were consistent with NCS and the Five Year

Kathmandu: plans and promises

"The problem with Kathmandu is that though we have had six major studies of the city's problems since 1970, in practice there is a complete lack of planning."

The speaker is Dr Pitamber Sharma, Professor of Geography at Tribuvan University, now working as a Regional Planner in the Population and Employment Division of the International Centre for Integrated Mountain Development (ICIMOD).

Dr Sharma's frustration at the decline of this unique city, which was thriving in the 7th century, soon builds up a head of steam. Like everyone, he suffers the daily battle with the worst air pollution outside of Mexico City, with a quarter of the bus fleet over 20 years old and belching many times the permitted levels of diesel fumes, and hundreds of three-wheeled taxis brought in from India – each of them a mobile pollution factory.

Like others, he suffers repeated power cuts and water rationing, streets in an appalling state of disrepair and the consequences of ineffective protection of open spaces and an almost complete lack of any but the most primitive sewage disposal system. People in some of the poorest slums are actually using the water from the Baghmati river. So polluted is this that no one knows the extent of the problem.

As Dr Sharma points out, the Kathmandu valley is a great hollow which traps the pollution under an inverted cloud of cool air. It has also got a relatively small watershed from which the pollution is difficult to clear. The population, meanwhile has jumped from 100,000 to 600,000 since the 1960s, and continues to grow at about 14 per cent every year.

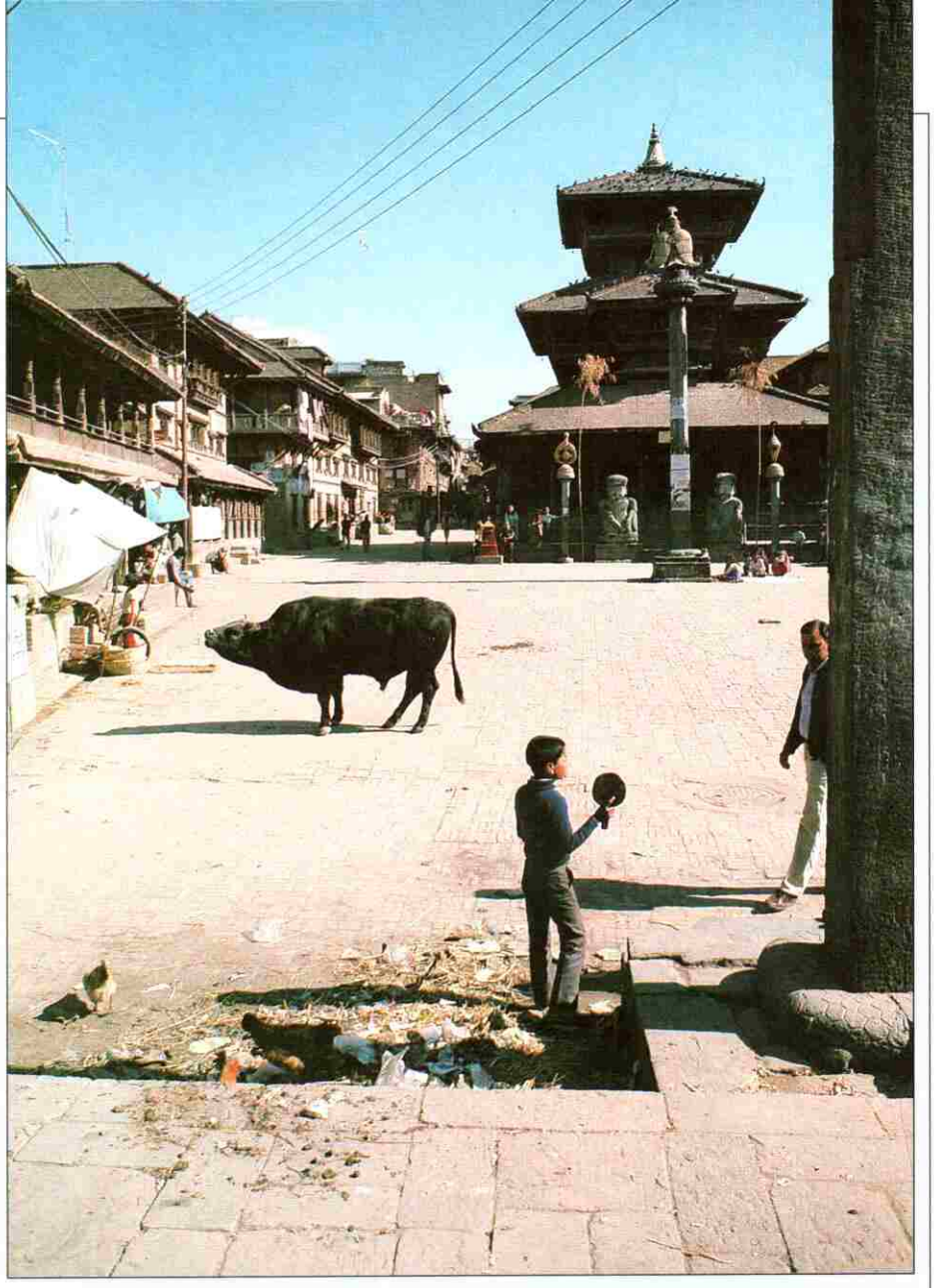
"The carpet industry, centred in the valley, pumps up good water for washing and the water table is going down. About 300 tons of solid waste is produced every day and the sewage is tipped raw into the stinking river. The city's regenerative capacity is being lost."

"Everyone can see and smell the problems of Kathmandu. But nothing, it seems, can done despite all the studies. Efforts to control the public transport system or to move the carpet industry have,so far, come to nothing. Promises are made but not kept."

Some things are, in fact, being tried. IUCN has been working with government agencies to identify pollution hotspots caused by industry. It found high levels pollution in Balajus district where 77 industries are pouring effluent into an irrigated area which is a bread basket for the city. A sand filtration system, funded by the Danish Government, is now planned to tackle this problem.

UNDP is also working on a project aimed at controlling traffic pollution, and has begun to train mechanics in emission control techniques. Meanwhile the city's horrendous sewage problem remains unsolved.

John Rowley



JEREMY HAMAND/IPPF

Plan.

(In fact, it was put together in five months on a shoe-string World Bank budget of $20,000 – with some supplementary funding from the Ford Foundation and IUCN – thanks to the help of a team put together by IUCN and is generally seen as a workmanlike document with sensible action points. It says, among other things, that "without a concerted, committed effort to curb the population growth rate, all other environmental policies will be severely undermined.")

It was not easy, Dr Yadav admitted, for the various Ministries to understand and accept that for every development activity they were responsible for the environmental impact. But, as a result of the NCS process, some ministeries now have an environmental cell which has been instructed in Environmental Impact Assessment guidelines, and all will be brought together under the Environment Protection Council set up a year ago under the Prime Minister's chairmanship.

Another key figure in the National Planning Commission, Dr Bal Gopal Baidya, the Member in charge of population matters, explained how strategies in his field are working. The Prime Minister now heads a Population Co-ordinating Committee on which all the relevant Ministries are represented. The Committee's job is to see that the strategies for extending family planning services and other population-related policies are carried out. He admitted, however, that "this process is still at the Knowledge and Attitude stage, rather than operating in Practice".

In practice, according to Dr Ram Neupane of the Family Planning Association of Nepal, family planning has had something of a setback, with many community-based workers being

Splendour and squalor cohabit uneasily in Kathmandu.
Left: *A square in Patan, one of the three ancient cities in the Kathmandu valley.*
Right: *Youths read magazines at a 'street library' in Kathmandu.*

JEREMY HAMAND/IPPF

displaced, as the government attempted to change from a vertical delivery system to a horizontal one in which various health services are provided as a package. The plan, according to Dr Baidya, is to encourage each village to build a sub-health post and to select staff, who would then be trained in family planning and other aspects of primary health care and paid by the government. So far only 700 villages out of 4,000 have such posts, though training with UNFPA and UNICEF help is going ahead and it is hoped to open another 600 posts in 1994.

Nepal, in fact, continues to have one of the most top heavy health services in the world and spends less than 4 per cent of its budget on it, though Dr Baidya hopes to get this up to 5 per cent in the current plan. Meanwhile fewer than a quarter of couples practice family planning.

Asked for explanations about why sustainable development plans do not seem to have been translated into broader action, commentators in Nepal fall into two categories. There are those like the outspoken environmental scientist Dipak Gyawali, who reject such exercises as irrelevant. He argues that they are not generally enacted into law, not fully debated in Cabinet or parliament and not always even translated into Nepali. And that, in any case, it is the people and not governments who need to plan for their own sustainable future.

There are others like Professor Lokraj Gopal, who has taught political science at Tribuvan University for 29 years, who see the problem as one of governance. For historical reasons, he says, Nepal's institutions for putting policies into action just do not work. This is a problem for many developing countries, he argues, but Nepal's case is the worst in the whole South Asian region.

"For the last 30 years we had one-man government, with power concentrated in the palace. It was a purely personalized system of government, a highly centralized system in which decisions never percolated down to the lower levels.

"We have inherited that system, and have begun to change it. But now with democracy there are other constraints. Leaders with no experience are having a very tough time. There are problems within the ruling party and with a very strong opposition party. There is partisan paralysis. There is also fear psychosis – touching on the previous regime, and the loyalty of the army. There are problems with the civil service, some of whom may not be seen to be loyal to the present regime, and many of whom are themselves politicians. There are no formal systems for appointments: political, bureaucratic, educational. The tax system does not work. There is little civic sense. Institutions at all levels are missing. Outside institutions, such as the World Bank, intervene, not always wisely."

Others such as Dr Pitamber Sharma, a regional planner at the International Centre for Integrated Mountain Development, also takes the western donors to task. "They have given the impression that if we go on saying the right things for long enough we will continue to get the funds." And the Government? "It has promised so much, but has never given the impression that the people themselves can solve their problems. Fortunately, there is no reason why old traditions cannot be revived."

On the positive side Dr Gopal points to the fact that Nepal has no ethnic conflict, the country is small and the process of building political consensus has begun. Nepal is in a formative period. And – in policy terms – it has been set in the right direction.

That is the positive hope of work on NCS and other such initiatives. This includes the environmental education efforts with very progressive curriculum materials from the lowest primary classes, the plans to protect Nepal's cultural, natural and genetic heritage and to develop systems to tackle pollution (see box). The work led by IUCN to develop guidelines for a nation-wide system of environmental planning based on the experience of eight villages and two districts in the middle hills shows the human potential for sustainable change (see page 14).

Some positive signs of Nepal's efforts to attain meaningful development are to be seen in the gradual shift of budgetary focus to 'soft' social sectors, such as education, health care and provision of clean drinking water.

From this year, Nepal has started to provide free education up to class seven and scholarships and education materials for girls students up to class five – though these levels still fall short of those recommended by the UN Development Programme.

Transforming Nepal's predominantly poor agrarian economy is a difficult task but it can be done by proper motivation and encouragement, Krishna Oli, a planner at IUCN says. "Our villagers already have some very practical traditional technologies to build upon. All they need now is motivation to do as they have always done in the past."

A new set of decentralization laws were formulated in early 1992, following which Nepal held local government elections. These new laws provide the basis on which the traditional community conservation processes can be revived.

The government's decentralization policy aims ultimately to hand over to the local people the charge of their development and to make local institutions accountable to their constituencies. The government role would then be to assist with external financial and technical inputs.

The poor and often illiterate rural people of Nepal are rich is their inheritance of traditional wisdom. This underused human force holds the potential to dig irrigation canals, plant trees and engineer stable hillside terraces. "I have seen that working, it is real", says Oli who works on the village programme at IUCN.

Today almost every ruling Nepali Congress party leader talks of fulfilling "B.P's dream" (B.P., quoted at the top of this article is no longer living, but still much revered) whenever development comes up for discussion. Few define the dream.

The following lines taken from an interview with him in 1978, may help set the priorities: "Our development starts when we mobilize the people. We have manpower, and land. We have to mobilize this manpower." ■

Bhorletar: the sustainable village

In a unique attempt to show how village people can plan and carry out their own development activities in a sustainable way, the World Conservation Union (IUCN) has been working in eight villages in two adjoining districts of the middle hills of Nepal. *John Rowley* **reports here from one of these – Bhorletar. Nepalese photographer** *Bikas Raunier* **took the pictures.**

Walking along the track from Bhorletar to Duipiple, we came across an elderly woman wearing a traditional blue *chola*. She approached briskly and, after the usual greeting, we asked where she was going.

"To Bhorletar to return to my son, who is sick." Was this her only child? "No, I have been blessed with 10 sons and three have survived. So I am a happy women." And she laughed.

Though perhaps around 60-years-old, she had been up at dawn to make the three-hour walk to Duipiple to arrange with her married daughter there for the next day's Teej festival (when daughters are united with their parents in a ceremony of purification, fasting and feasting).

It was not yet eight in the morning, but this widow had thought nothing of the six-hour walk. In this country of hills and scattered villages, with few permanent roads, such resilience is essential. And it was to see how this spirit was being put to work in the face of rapid change, which threatens the carefully engineered balance of people and nature, that we had made the 220 km journey from Kathmandu to Bhorletar in the wake of the late summer floods. These had been unusually ferocious, sweeping away roads, hydropower installations, farms and homes, and killing at least 2,000 people.

The rains had washed away a good deal of the dirt track road which runs from the main Kathmandu-Pokhara highway at Damauli, along the valley of the Madi Khola (river) to Bhorletar. Only recently completed, this road is, in any case, only suitable for tractors in the dry winter months. For the rest of the year it reverts to a mule track, but with much of the colour and variety of a medieval pilgrims' way.

Children with bullocks, mule trains laden with kerosene or Coca-Cola, old men with umbrellas as protection against the hot sun or sudden late monsoon showers, and women and children laden with firewood or fodder, all follow in succession, fording the streams and climbing the stony path beyond. In many ways it seems a rural idyll. Fine, recently introduced Red Hampshire

Left: *Widow on the road to Bhorletar.*
Right: *Collecting fodder.*
Below: *Packhorses in Bhorletar.*

cockerels and their hens and chickens fly underfoot. Buffaloes wallow in the streams, small children chase wandering goats. Monkeys scamper down from the forest slopes and a host of golden butterflies suddenly dance across the path, to recur and flash, like Wordsworth's daffodils, upon the inward eye. The views across the wide valley, with its silver river, terraced rice fields, and the sudden sight of Annapurna's southern face, rising amazingly whiter and taller than the distant cumulus, is stunning.

The 'tar' of Bhorletar means 'flat' and the saucer-shaped piece of flat land at the end of the track is beautifully placed. Below it, rivers converge on three sides, and above the valleys the forested hills rise for some 3,000 feet.

Where the road runs out is a rapidly growing settlement of some 150 houses, more like a Wild West town from the 1890s than a medieval or modern one. In the morning, pack horses fill the single dusty street of two and three-story houses and, in place of saloons, a dozen tea shops open up their shutters beneath the painted wooden balconies.

The village, previously the basic unit of the non-party political unit, the panchayat, is now – since democracy was declared in 1990 – run by an elected Village Development Committee or VDC (one of some 4,000 in Nepal). It consists of 9 wards scattered across the surrounding hills. And though Bhorletar (which gives its name to the whole village) is itself a relatively prosperous township since the coming of an improved irrigation system a few years back and the completion of the road from Damauli, life in many of its scattered settlements has changed little from the very basic subsistence way of life. Indeed, Bhorletar itself was more or less deserted until malaria was defeated by DDT in the early 1960s and the first irrigation channels were dug.

Now the village centre is growing fast, with 35 new houses built in the last year – 20 of them by newcomers to the area. Without any town planning, the results are beginning to show in terms of pollution of the village canal, uncollected garbage and poor sanitation.

In many respects it is a typical Nepali village. Land is scarce, yet most of the villagers depend on farming. Roughly half the village land is cultivable but there is less than half a hectare for each of the 3,000 people living there.

We had come to Bhorletar because it is one of eight villages selected by the National Planning Commission and IUCN to develop and test a system of local environmental planning which could be applied to the whole country. Such planning, in the words of IUCN, requires "inter-sectoral collaboration, a participatory approach, decentralized decision-making and the genuine devolution of power over resource management to local communities." The exercise is a central part of a continuing effort to give life to the National Conservation Strategy, work on which began in 1983 and which was endorsed by the government in 1988.

The task of drawing up environmental plans for Bhorletar and the seven other villages in the two districts of

Left: *Village houses, Bhorle.*
Below left: *Annapurna in the distance.*
Right: *Bhorletar village street and surrounding paddy.*
Below: *Amritar Gurung, at home.*

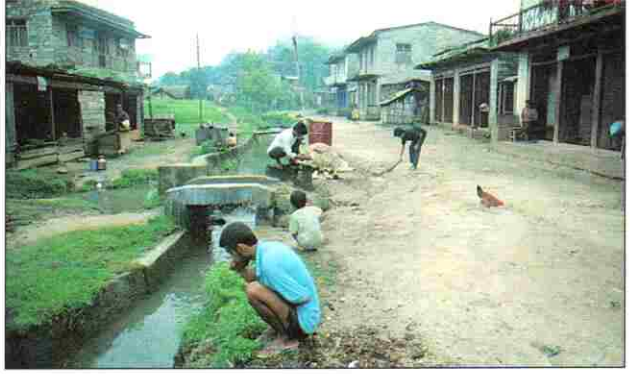
Lamjung and Arghakhanchi, was begun in 1990. With the help of two non-government organizations and the IUCN planning team, each village began by preparing a profile of itself.

A system of 'participatory rural appraisal' was used to collect information about every aspect of village farming and life. This included drawing up detailed land use maps. A local teacher was trained to carry out these activities in each village, working with the local steering committee and the community as a whole.

In Bhorletar, a local geography teacher took the lead in writing up the village profile, which then went through various revisions. It includes details such as the number of springs, forest patches, tree species, landslides, cropping patterns and hazard-prone areas. The profile highlighted a number of problems: rapid depletion of forest resources because of increasing population and encroachment on the forest; a lack of latrines now made essential because of population growth; flooding and erosion in the three river valleys; domestic animal diseases, especially liver fluke transmitted by snails which flourished in the new irrigation channels; a lack of clean drinking water and a problem of increasing numbers of landless immigrants.

Finally, an environmental plan based on this profile was defined by the villagers themselves, and approved in meetings with the local District Council and representatives from the various line agencies of the central government.

Each village selected its own activities for priority action, with project funds to supplement the work of people from the village. The idea was to test out the soundness of the planning



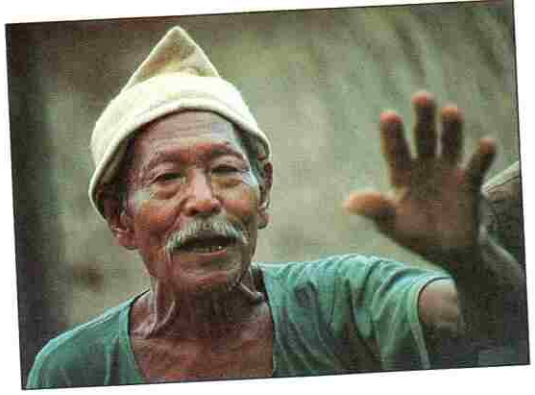
process and the willingness of the village people to put it into practice, with the necessary technical and financial help from outside.

A series of recommended solutions were also drawn up. These included community forest conservation rather than leaving it to the government, new gobar gas plants with increased livestock and improved fuelwood stoves to cut down on the use of fuelwood; new latrines; protective dams and afforestation to stop flooding; duck raising to control snails; improved roads; vegetable gardens and marketing; and a new health post.

To make sure their needs are met sustainably, the villagers have listed changes that are needed in cropping patterns and have already started trying out some of the 'solutions' such as introducing nitrogen fixing legumes into the paddy and wheat fields.

But top priority for immediate action was given to clean drinking water, to be provided by a system of gravity-fed pipes and taps alongside a system of long-term community maintenance, watershed protection, toilet building, fruit tree planting and vegetable growing to take advantage of the convenient supplies of water. At the time of our visit to Bhorletar, in September, work on the drinking water project, which covered 110 households in four wards of the village, was completed and plans were being laid for the formal opening ceremony by a Minister.

It has been a remarkable achievement by the 'user groups' in the four hamlets which have benefited from the project. As Bhim Bahadur Gurung, a former Gurkha soldier from the village who helped engineer the work, told me, the women who helped carry the stones



and sand up from the river bed had to struggle long and hard. Each had to carry between 15 and 20 kg of sand and cement (with some carrying as much as 40 kg) in a four-hour walk down to the river and back.

In all, the volunteers, both men and women, each put in about 90 days of free labour and dug some seven kilometres of pipeline to a depth of three feet, serving 22 taps. This included one extra tap for the primary school for which the parents provided all the materials.

One of those to benefit is 33-year-old Amrita Gurung, the second wife of another retired Gurkha who has built a fine stone house overlooking the Madi Valley on the way up to the hamlet of Dhodre. She now has tap number four just outside the house – one of five serving 39 households.

"Before this miracle happened I used to have to make the half hour climb to the spring maybe six times a day. Now I can spend much more time weeding the rice, and maintaining the terraces, as well as planting vegetables and fruit trees. We have just planted six mandarin orange trees and have built a toilet as well."

The climb up to the tap is eased by an 180-metre-long stone stairway, built by the villagers with funds given by a childless widow of another military pensioner, who lives further up the hillside. It was done as a contribution to her 'dharma' or, as she explained, "so that the soul of my husband (and my own) will rest in peace". It is an example of the tradition of service and self-help which still remains in these hill villages.

Just how tough the daily trek to the original water source must have been we found out by climbing there through a path now already overgrown and full of leeches which left our feet and ankles in a bloody state. The water cascades down from a spot high in the hill through a stone grotto where the goddess Akali Devi rests. The water is collected in a well-built tank and then carried by pipe to other tanks holding 16,000 litres each, which serve individual taps in two of the wards. A shelter for worship has been built at the grotto and the area is fenced off for tree planting which will further protect the water source. In the four wards served by the project, there are three such sources.

Elderly members of the five-man users committee at Dhodre explained that rules have been agreed for using

the various taps (some being kept only for drinking water, others for washing and other uses). Each household in the hamlet gives 5 rupees a month (or about $1 a year) towards the cost of maintaining the water system. This paid for two men, trained in plumbing, to look after the pipes and tanks and mend the taps as necessary. In the dry winter months the water is rationed to certain hours.

Such community planning shows the potential for self-help development in the villages of Nepal.Talking to the VDC committee at Bhorletar township, and to user groups high up in the hills at Dhodre and Bhorle, a number of common themes emerged. One elderly farmer wearing the usual colourful Nepalese cap, Aak Bahadur Gurung, expressed one of these: "The village is ours," he said "and we should look after it."

Another bright young student, home from college, Dharma Raj Regmi, summed up some of the agreed things that the villagers could do to improve their lives. "We can plant fodder trees, and multi-purpose trees to stop further erosion, we can extend irrigation by at least another 10 hectares, we can build more toilets in the houses, and we do have enough buffaloes and cows to run biogas plants. We need a bridge over the river so that children can get to school and we need smokeless stoves. We can even experiment with solar electricity for lighting and run small hydro plants. All we need is technical help, some materials and some money. We will do the rest."

But it was noticeable that in all the meetings we had, only a few, elderly women were present. "The younger women are all in the fields, working," I was told. One man explained "The women get up early. They do the cooking, milk the cows. By 10am they serve lunch and are then off to the fields where we have scattered holdings. They weed the millet, cut the grasses, maintain the irrigation channels." And all this in the quiet season before harvesting of the summer rice.

In the primary school,too, I noticed that fewer girls were enroled in the first year but by the second year – when they were seven – more than half had dropped out, kept home to look after the animals and do other work. Strangely, in the one secondary school also built by the villagers themselves after a major fund raising effort, with tin roof and mud walls, girls made up 35 per cent of the pupils, though few made it through to the top class.

The village profile did not throw much light on this aspect of Bhorletar's development, though it does estimate that only about half the population can read and write and calls for literacy

Left and right: *"The village is ours, we should look after it." User group members at Dhodre.*
Below left: *Tap number four.*

classes for young and adult females. "Female education", it says, "has recently become more accepted, but more to improve the girls' marriageability than to turn them into influential citizens".

Understandably, the profile and plan show no interest in tackling the question of population growth directly through improved family planning and health services or through the education of girls and the reduction of child mortality. Contaminated water, poor diet and a polluted environment are given as the main causes of a child death rate of around 100 per 1,000. There is no health post in Bhorletar and the nearest hospital is seven hours' walk away.

The profile says most residents regard family planning negatively, with at least one man complaining that vasectomy has caused him back ache and hindered his farm work. According to the profile, 99 men are practising family planning and only five women. As a health worker explained to me, the only family planning commonly available has been an annual vasectomy camp. Women find sterilization services almost impossible to obtain, though they are increasingly using Depo-Provera injections which are now available at a health centre in the adjoining village, though supplies are erratic. "Many women suffer giving birth" he added. "Some end up dying on their way to Pokhara, which is the nearest hospital. For the four VDCs near here we have only one nurse. That is hopeless."

It would seem that care for and development of the human resources of Bhorletar, and especially the women, need to be given rather more attention in the blueprint for sustainable village planning which has been so painstakingly developed. At the same time ample, clean water is proving a marvellous entry point for many other positive developments.

Bhorletar's experience, and that of the seven other villages (see panel) has proved that local communities can plan and carry out their own development programmes. "Our experience has shown that this is possible" says Krishna Oli, an IUCN planner in the project. "Nothing is impossible given that we have real decentralization, proper motivation and supervision.

"This exercise has shown that given the authority and skill, villagers can plan their resource use system and carry out plans far more effectively than the usual top-down government process. This process has even been adopted by a number of local NGOs, and the District Development Committees are encouraging other village-level planning initiatives."

What remains to be seen is how far the District Councils, which have very little money, or the line agencies of the 21 government departments (which have a good deal, but seem to have little to spend at the village level) can provide the sort of practical and efficient support that Bhorletar has had. That is always assuming the initiative gets beyond the offices of the National Planning Commission at the great white Rana palace in Kathmandu.

In the meantime, the upright, former Gurkha lieutenant, Mim Bahadur Gurung, who chairs the Bhorletar VDC, was anxious for me to convey his message back to Kathmandu.At a final meeting he pressed two points. First the village needs help with town planning. The government view is that town planning is not an issue until settlements have reached metropolitan status. By then it will clearly be too late to make sure that Bhorletar has the environmental infrastructure that it deserves.

"Secondly, please send us an enlightened woman who can talk to our own women and help to educate them and mobilize them to improve their lives." It does not seem a lot to ask. ■

For further information on IUCN's work in Nepal, contact Dr Arzu Rana, IUCN, PO Box 3923, Kathmandu. Fax: 9971-521506

Big hopes for fruit farming

Higher up the valley from Bhorletar lies the remote hill village of Taghring – another of the eight which have developed their own environmental plan.

Here the villagers decided that the key task was to make use of 22 hectares of abandoned public land for an agro-conservation project. Making use of a provision in the recent Forest Act, they leased the land and planted about 5,000 apple and 500 pear saplings, under the technical supervision of the district agricultural officer.

The local community made all the management decisions about where to allocate rights of way for livestock and grazing, while the management of each plot of saplings is the job of the individual owner.

If this project is successful, the community could earn an estimated income of Rs 5 to 6 million (about US $120,000) every year once the trees bear fruit. This type of project is relatively new in Nepal, especially in the hill areas, and if successful could be copied in other impoverished and degraded areas for both conservation and income generation.

The community has also attempted to rejuvenate degraded land lying just below a landslide which destroyed 60 households. About 6,500 suckers of cardamom (spice) plants have been transplanted under the alder canopy to stem the landslip and generate income at the same time.

The active co-operation of local government and political bodies and the allocation of resources will be essential if such bold schemes can be taken up across the country. There will probably be a need to provide some form of 'expenses' for the local village leaders, and to rebuild some of the traditional resource management systems which have been breaking down under the pressures of political and other change.

Arzu Rana

Dr Arzu Rana heads IUCN's Public Information Programme in Nepal.

'These virgin peaks must be kept inviolate'

Forester, ecologist, author and tourist entrepreneur, *Karna Sakya* is a long-term campaigner for 'sustainable tourism'. President of the Nepal Heritage Society and a member of the National Tourism Council he is Trustee and Advisor to many other local environmental bodies. Interviewed in September in Kathmandu he explained his hopes and fears for tourism in Nepal.

People & the Planet: **As a conservationist and a businessman how do you see the future of tourism in Nepal?**
Karna Sakya: Tourism is an inevitable industry for this country because we have few other options for survival. Agriculture, industry, hydro-electricity and mining all have real limitations.

Only about 15 per cent of our total land area is suitable for agriculture. The rest is marginal land and mountains, and it is impossible for that small total to feed 19 million people and a population that is growing so fast. We can develop agriculture but we cannot rely on it to meet all our needs.

As for mines and minerals, our mountains are very young and the experts doubt that these can ever be commercially viable.

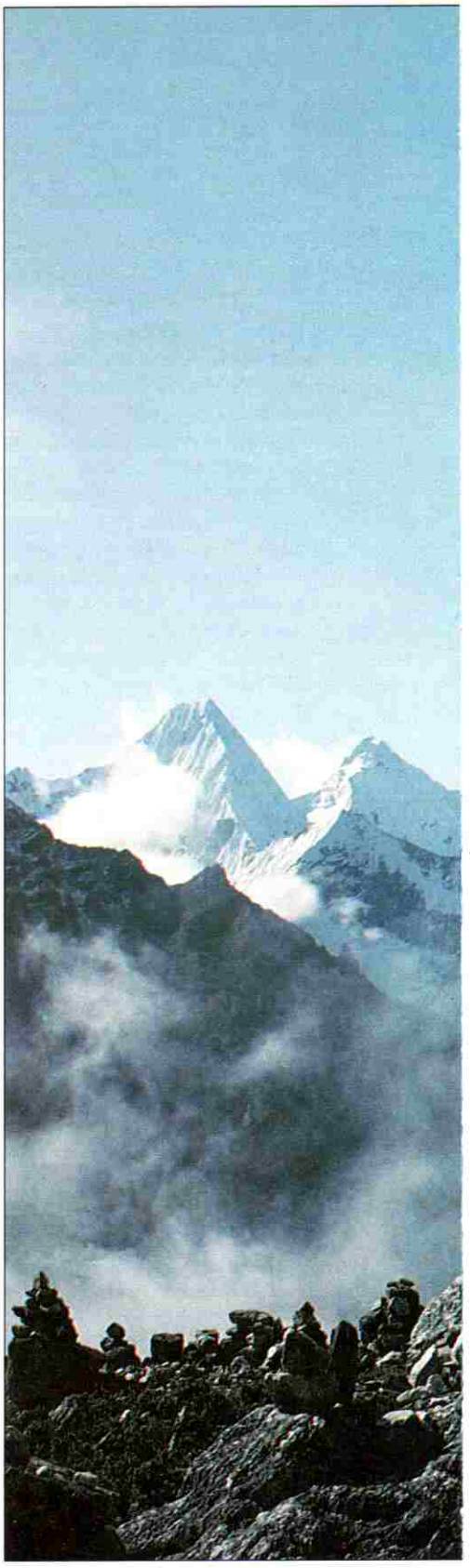
The third hope is industry. But we are surrounded by China and India, both of which have their own conservative trade policy. They welcome our raw materials but they will not help our industry to grow. So there will be political constraints as well as economic constraints on our industry for a long time to come.

We do have one immediate resource that could be made to mobilize a huge amount of money, and that is hydro-electricity. But the development costs are tremendous and the Indian Government may not wish to be too dependent on buying electricity from our country. They would like to generate their own electricity.

So there is only one option left, and that is tourism. Here we are fortunate because we have the most beautiful natural and cultural heritage. We have no less than seven world heritage sites. Moreover, the living force of our diverse and varied culture is so strong that it is not easily changed. It is probably true that here tourism does not so much change culture as that tourists change in response to our culture.

Someone has estimated that Nepal has the second largest concentration of art and cultural objects for its size in the world. So with these assets this country has got to be a destination for those who respond to both culture and nature. **How can Nepal exploit these riches without damaging them? How can it take more and more tourists and still preserve its wilderness unspoilt and the diversity of its culture?**
This is a very difficult question. I sometimes fear that the Government thinks only of the economic returns from increasing numbers of tourists, and that is not healthy. It's true that there is tremendous potential from tourism, but if tourism goes beyond the limit it will destroy itself.

Many have now realized that the sustainable development of tourism is very important but many others are thinking



Snow-clad peaks rising to 19,000 feet in the Sagarmatha (Mount Everest) National Park. In the foreground are stone cairns in memory of lost mountain climbers.

JOHN MCEACHERN/IUCN

only of how to make more money. And, generally, it is the politicians and bureaucrats who give in to the blandishments of the money-makers.

The war between the economists and the ecologists goes on everywhere and it is usually the economists that win. In that situation I do not think the conservationists should give in. But it is not an easy battle.

Can you give an example of how tourism in Nepal is going wrong – and explain what you see as 'sustainable tourism'?

We have to make tourism a good servant, not a bad master. Tourism is, after all, a smokeless industry. It is also a fantastic transfer industry. The money which comes to Kathmandu also circulates in the village. It is an industry where you do not have to exploit your product, where what we have to sell is just a smile.

At the same time tourism can be disastrous. Take Lukla, near Mount Everest, home of the wonderful Sherpa people. If you go to Lukla you will find a couple of thousand people. But when the tourist season opens more than ten thousand tourists go there, more than five times the local population. You can imagine the effect on this cultural and natural site.

If we really want to save the natural patrimony of the country it is essential that we adopt the 'bed limit' system. It ▶

Tourist dollars

Nepal earned about US $61 million from tourism last year, just a little less than its top earner, Tibetan rugs, which pulled in about $70 million. The Government plans to expand this with an increase in tourists from 330,000 to 500,000 by the year 2000.

Of the 70,000 trekkers, some 45,000 home in on the Annapurna sanctuary, but more and more are heading into some of the most remote and fragile regions.

A recent report on tourism in the hidden world of Upper Mustang – the 11th century kingdom of Lho – says that within one year, the pristine trans-Himalayan landscape was being scarred, the carrying capacity of the medieval capital of Lho Manthang (with its population of only some 1,000) exceeded, and antiquities worth $160,000 siphoned out. Intrusive 'welcome' signs now appear on the gompas (monasteries) and children are learning to beg.

On the other side of the ledger, several agencies are working hard to devise tourist management plans which will protect Nepal's cultural and natural treasures.

The King Mahendra Trust for Nature Conservation, through its Annapurna Conservation Area Project, is developing an eco-trek circuit away from the Annapurna sanctuary, building up camp sites which will not involve the use of fuelwood and working with local people so that they can benefit. It is trying to find ways of protecting Upper Mustang through an ecotourism approach which includes Gompa restoration and small scale rural development projects.

IUCN Nepal, meanwhile, is working on an eco-tourism plan for the remote, resplendent but economically depressed Manaslu-Himal area in the Gorka district of north-central Nepal, some of whose children are pictured below. Manaslu, which is home to the world's seventh highest mountain and such diverse ethnic groups as Tibetan, Gurung and Tamang, was off-limits to tourism until 1992, when organized group treks were permitted. IUCN's plan is being prepared with the consultation of local people and seeks to ensure that trek tourism is environmentally sound and sustainable.

Ecotourism here is not seen as 'a project', but as a long-term programme to develop the natural and human resources in the area.

Arzu Rana and Binod Bhattarai

JOHN MCEACHERN/IUCN

is probably not possible to adopt Edmund Hillary's idea of giving Everest a total rest for five years, but we could limit the number of tourists and increase the price of entering the area in order to support nature and the culture of the people.

At the same time we have got to educate the tourists as well as the villagers. In practice it is not easy to educate the villagers – it is not easy to educate a hungry cat. But you can easily educate the person who puts milk in front of the cat.

It will be easy to train the tourist, who generally comes to Nepal as a nature lover. Whether tourists come on a charter flight or as independent travellers they should be given a document setting out what to do and what not to do in the country. They could be shown a video by the tour operator or airline, which will help their understanding and help them pay respect to the local culture. I do not mean to say that we don't have to educate the villagers too, in a different way. Education is a very important part of tourism.

You also have to educate your politicians?

Exactly, though they never realize it. Fortunately, it is not necessary to be a 'big shot' to lobby in this country. I am very proud that I managed to save the remote regions of Dolpo and Mustang from being opened up to tourism for many years – though both are now opening up, not very satisfactorily.

If we want to develop tourism for tomorrow, we have to preserve some of the remote areas. The majority of tourists come to Nepal because it remains exotic, a mystery. When Manang was opened to tourists it was like a fabulous blue flower, unknown and fantastic. For two years the tourists flocked there. Now it has lost its never-never land appeal. Now they want to go to Dolpo, Mustang, Syarbhot, Charkabhot. Now they are offering to put tourists on the top of our highest peaks for $5,000. We are trampling on the people's spiritual beliefs.

At present we talk about sustainability in terms of economic theory. We should also think about it in terms of the human spirit. If we open the last of our virgin mountains to climbers, something of the wonder and mystery of the Himalayas will be lost. So it is very necessary for us that those virgin mountains are kept as they are, in the unknown realm, Temples of the Gods. ■

Sustaining life in frontier land

WWF/PATRICK DUGAN

On the Caribbean coast wetlands of Northern Costa Rica, the local people find themselves squeezed between a National Park, the sea and expanding banana plantations. Now they are being drawn into a sustainable development strategy. *Robert Prescott-Allen* **sent this report from the Plains of Tortuguero.**

"When the PACTo (strategy) people came in 1991, many of us said 'we don't want these f------ people – we gonna kick their arse'. But now, we want them to come back. If they don't come back we gonna lose a lot of things."

So Marvin Fletes Downs, President of the Community Development Association of Barra del Colorado, summed up his village's change of mind about a local sustainable development strategy.

The strategy is the "Conservation Strategy for the Sustainable Development of the Plains of Tortuguero". These plains cover 419,000 hectares of lowland rain forest and wetlands along the Caribbean coast of northern Costa Rica.

Barra del Colorado is a fishing village in the north of the area. Like most villages on the Atlantic coast from Belize to Panama, many of the inhabitants are West Indian blacks. Two of them, George Palmer Oregon and Orville Beckford Chollette, expressed some of the community's resentment at government neglect:

"The Government benefits a lot from tourism here, but don't do nothing for us. No bus service because the road is so bad. The canal to Limon has been blocked since the last hurricane. Anyone who has to go to hospital has to pay 5,000 colones ($35) for gas for the ambulance."

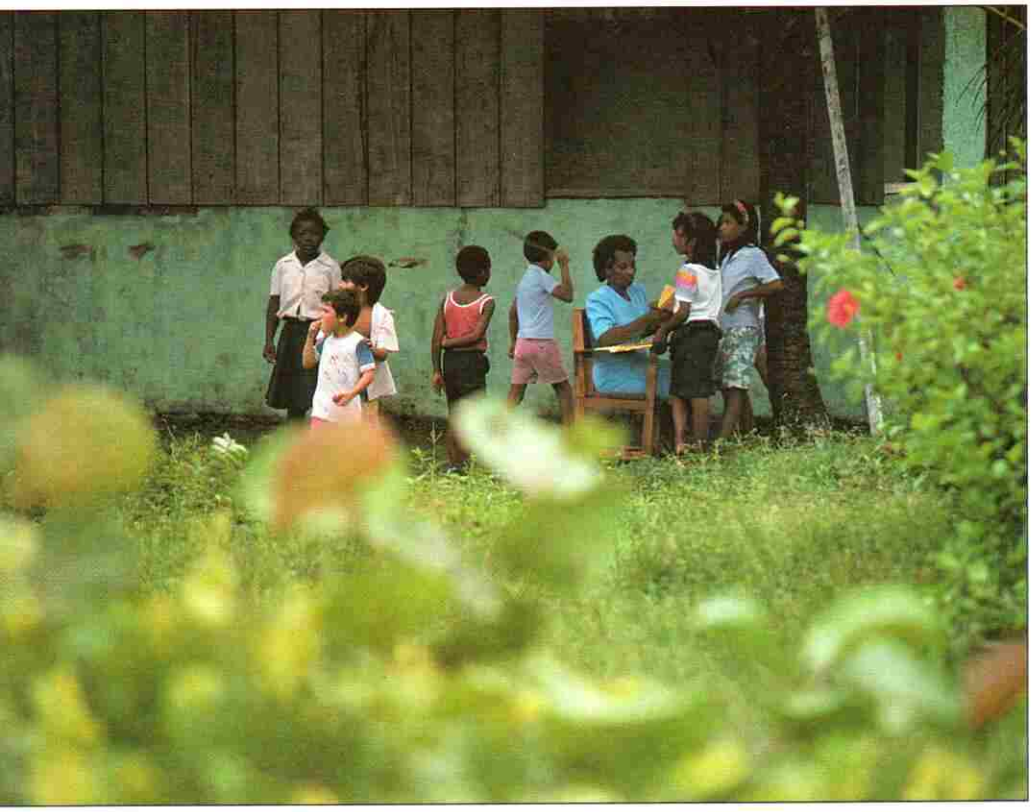
The only road to the nearest town in frequently impassable. When we came here in July, our four-wheel drive couldn't make it. We finished the journey by boat, pottering along the curvaceous Cano Zapote through Raphia palm wetlands, into the grassy expanse of the Rio San Juan delta.

Isolated from the rest of the country, Barra del Colorado was ignored by the national government until 1985. That year, the government established the Barra del Colorado Wildlife Refuge. Shortly afterwards, the Wildlife Service moved to expel refugees from the civil war in Nicaragua, who had settled in the area. Unfortunately, it did not take care to distinguish between refugees and residents.

Since then, relations between the community and the Wildlife Service had been bad. Villagers were deeply suspicious of officials who came out of nowhere claiming to be working for the general good. So when the IUCN strategy team rode into town, the villagers wanted nothing to do with it.

Many meetings went nowhere, Marvin Fletes recalled. Then eight people from the strategy team and five villagers "went from house to house, visiting more than 80 families, asking them what they wanted. They worked for three days, travelling in the lagoons and rivers and talking to people." This was followed by a community meeting with an impressive 70 per cent attendance. The team set out the needs and problems identified through the survey, and then asked the meeting to propose solutions.

This participatory diagnosis of prob-



Children at school in the proposed Tortuego Conservation Area. No action has yet been taken to help parents plan for smaller families.

lems and solutions was the turning point. Afterwards the strategy team and the community development association made a written agreement to work together. Among the results so far:

- A communal bank has been established. The bank lends at 2 per cent; the local money lenders at 20 per cent. Already the hold of the money lenders has been broken, and villagers are starting to save.
- A community fishers' association has been formed and has helped to obtain a boat and fishing gear for individuals who lack equipment.
- Villagers are being helped to obtain title to their land, through a census, surveys of land tenure, and assistance with legal costs.
- A feasibility study has been made on public transport to link the coastal communities with the rest of the country.
- The school has been provided with new chairs.
- A doctor visits every week. Previously, medical visits were only once a month.

The aim of the Tortuguero Strategy is to improve the quality of life of people in the area, and conserve its biodiversity, through mutually supporting actions toward sustainability.

Costa Rica has an outstanding system of parks and nature reserves, covering more than 11 per cent of the country. But conservation outside these areas is neglected. Deforestation is the highest in Latin America; and at current rates, all timber yielding tropical forests that are not in protected areas will disappear by about the year 2000.

As in many other Latin American countries, the agricultural frontier is advancing quickly, impelled by population growth and migration. New settlers turn forests to farmland in desperate attempts to carve out a living. Wealthier individuals and companies establish cattle ranches and plantations of export crops such as bananas, part of the national drive to earn foreign exchange.

As the frontier expands throughout the country, protected areas are becoming biologically isolated from each other and more exposed to invasion, pollution and other damage from outside their borders. The communities who live in the surrounding land get few benefits from the parks and regard them as obstacles to economic improvement.

The Tortuguero Strategy provides for establishment of a 147,000 hectare Conservation Area. This consists of a 62,000 hectare zone, dedicated to conservation of biodiversity; and an 85,000 hectare buffer zone dedicated to sustainable development of the communities living in the area.

The core zone includes the existing Tortuguero National Park, key parts of the Barra del Colorado Wildlife Refuge, and a corridor linking the two. It will be connected to other protected areas in Costa Rica and Nicaragua.

The buffer zone is like the filling in a double decker sandwich: the three layers of "bread" consist of the sea on one side, the core zone in the middle, and expanding banana plantations on the other side. About 5,000 people live within the buffer zone and another 132,000 live in the neighbouring area to the west. The coastal communities feel squeezed between the sea on one side and protected areas on the other; while the inland communities feel squeezed between the protected areas and banana plantations, which more than doubled their extent between 1984 and 1992.

One of the objectives of the strategy is to stop and reverse deforestation in the buffer zone, restoring forest cover to 80 per cent of the area by the year 2020. This will require enabling the resident communities to meet their needs in sustainable ways; and stabilizing the number of people. The strategy addresses the first requirement, but not the second.

Ninety per cent of the people living in the area lack guaranteed land tenure. A land use plan has been started, including participatory surveys to help local people secure title to their lands. The plan is intended to solve land tenure issues, zone uses according to land capabilities, and provide for land use plans for farms.

Local initiatives have been supported with seed funds. The strategy has provided $50,000 to the Union of Small Agricultural Producers of the Atlantic (UPAGRA) to train its members in management and help them develop projects in such fields as ecotourism and forestry management. UPAGRA also helps women to develop income-earning opportunities – for example, by growing and selling medicinal plants. Local people are also helped to take advantage of state incentives for managing woodland and reforesting river banks.

A committee of the Ministry of Agriculture, MIRENEM, IUCN and the National Banana Corporation was established to analyse the effects and implications of banana expansion on the area. IUCN-ORCA undertook an evaluation of the environmental impacts of banana expansion in the zones of Sarapiquí, Talamanca and Tortuguero, and recommended ways of reducing these impacts. The recommendations have not been implemented.

The process of preparing the Tortuguero Strategy started in late 1990 with an agreement by the Natural

Where loggers and tree huggers play

Canada has launched two national strategies to conserve its environment at a time of rapid development: a government Green Plan and a more broadly-based Projet de Société. But some of the fiercest battles rage at a local level, as *Robert Prescott-Allen* reports from Vancouver Island, British Columbia.

C. PRESCOTT-ALLEN

"Over the last seven or eight years I have seen our (logging) crew downsize from over 75 men to 30... Our government has had no problems whatsoever in consistently taxing the shit out of us, but has never done a damn thing to help any one of us that lost his job. Now, once again, more cut backs are being proposed. I love my planet and would like to see the whole thing as one big park. However, there is only one problem: people and lots of them."

"It is truly unfortunate that there is not enough timber to go around but it is not morally correct to alter and change forever this magnificent area. We seem to be encouraging and feeding an international corporate giant that is rampaging out of control in our home. The watersheds of Clayoquot Sound that are in their natural state should be left that way."

These opposing views are typical of the comments on the draft strategy document of the Clayoquot Sound Sustainable Development Strategy. This local strategy was an attempt, sponsored by the provincial government of the British Columbia, to get residents and resource users to agree on the allocation and management of uses in one of the most beautiful places on Vancouver Island.

As the largest tract of old-growth forest on Vancouver Island, Clayoquot Sound is both a key resource for the timber industry and a place of supreme importance for environment groups and the wilderness movement. The area is also under aboriginal land claims, coveted by the mining industry, and an arena for conflicts between fishing and fish-farming.

The strategy was developed in 1991 and 1992 by a steering committee of representatives of aboriginal peoples, municipal governments, provincial and federal government agencies, and nine interest groups (aquaculture, environment, fishing, labour, mining, small business, big timber companies, small timber companies, and tourism). The environment interest group resigned during the process over a decision by the provincial government to allow a disputed area to be logged.

Resources Ministry (MIRENEM), IUCN and the European Community. Biophysical, socio-economic, institutional and legal studies were undertaken and a draft strategy document was produced in 1991. A second draft was produced in 1992, and awaits official approval. Community leaders, local organizations and a strong technical team participated in preparing the drafts.

Community strategies have been started in two of the communities, and written agreements to undertake joint studies have been made with three communities – Barra del Colorado being one of them.

The strategy is currently being held up by a delay in funding the next phase. The strategy includes a financial plan to enable the strategy to be self-sustaining, but this has yet to be implemented. The draft law establishing the Conservation Area awaits approval by Costa Rica's Legislative Assembly. This law will also confirm the strategy as the policy guide for state organizations operating in the area, and establish an intersectoral committee to coordinate activities in the buffer zone.

Among the main lessons so far is that participants, including donors and the government, should understand that the strategy is a long term process, not a short term project. Continuity and momentum are most important. Breaks in the process between funding agreements is usually damaging, causing frustration and loss of confidence. It is also important to build national support for the strategy while it is being prepared, so that its official approval is not delayed.

Another lesson is the need for full community participation from the beginning, rather than relying on local leaders alone. Their experience in Barra del Colorado has shown the strategy team that participatory diagnosis of problems and solutions, environmental education, and seed funds for local initiatives are essential to help gain community support and credibility.

As Marvin Fletes' blunt assessment makes clear: to earn the cooperation of a community you have to help them solve their own problems. ■

The process was highly participatory, due to the broad composition of the steering committee, and its unique standing with the provincial government: in effect, government handed over decision making to the committee. It undertook to endorse and implement any consensus agreement of the committee, subject to budgetary constraints. The government's interests were protected by its representation on the steering committee. This undertaking, coupled with the consensus basis of committee decisions, provided all participants with a strong incentive to try to reach agreement.

The participants managed to agree on principles of sustainable development, a number of goals and targets, and a wide range of actions. But they could not agree on how much of the land area should be protected, and how much should be open to logging and mining. Failure to agree on one item nullified agreements on the other items. All the decisions reverted to government.

In April 1993, the BC government made a decision that attempted to balance "the need to protect the unique environmental values of the Clayoquot area, and to maintain a viable forest industry and stable forest-based communities." Protected areas have been increased from 39,100 hectares to 87,600 hectares (from 14 per cent to 32 per cent of the land area). They include two intact watersheds – and several smaller areas that are designated as a scenic corridor, where scenic values will have priority. New more stringent forest practices are being introduced, along with extra staff and resources for monitoring and enforcing them.

As a consequence of this protection, the Allowable Annual Cut has been reduced from 900,000 to 600,000 cubic metres. This means that 400 direct and 600 indirect jobs will be lost. Provincial revenues are expected to be reduced by C$7.6 million a year and the Gross Domestic Product by C$46 million a year.

The timber industry and its dependent communities felt that the decision was a reasonable compromise. Environmentalists greeted it with outrage, and mounted a blockade of logging operations. So far, more than 800 protesters have been arrested for defying an injunction against the blockade.

The case of Clayoquot Sound illustrates the sharp polarity of values in BC. It also shows how little room for manoeuvre the province has. Until recently, the province's policy was to liquidate most of the old-growth forest and manage the second-growth forest on a sustained yield basis. Timber production was regarded as the primary, if not the only, forest value. In the last few years, values and social priorities have changed radically. In response, the province's policy now is

C. PRESCOTT-ALLEN

DYLAN GARCIA/PANOS

Left: *Clearcutting old growth rainforest in Western Vancouver Island.*
Below: *Protectors ready to 'Save Clayoquot Sound'.*

to manage old and second-growth forests for all values and to do so sustainably.

It is extremely difficult to implement this policy without substantial economic and social disruption. Because so much has been logged already, it is seldom possible to "log around" contentious areas while their fate is decided. Either they are logged, or the industry is cut back.

Provincial strategies

Because of the paralysis induced by disputes such as the one over Clayoquot Sound, and wide public dissatisfaction with the decision-making on land uses, the provincial government established an independent statutory body, the Commission on Resources and Environment (CORE), in 1992. CORE is responsible for developing the province's Land Use Strategy. It has designed the framework for, and is supporting, a series of regional negotiation processes. Their purpose is to determine the broad allocation of land uses for the province's different regions, beginning with three regions where widely supported decisions are needed most urgently.

The process is one of shared decision-making. In each region, a 'table' is formed consisting of representatives of all interest groups that wish to participate. Within the framework designed by CORE, the 'table' decides on the process, and then makes recommendations to the provincial Cabinet on land use and zoning in the region. Cabinet retains decision-making powers; but it is understood that, if a consensus recommendation is made, Cabinet will adopt it. If the 'table' cannot reach agreement, CORE will make its own report to Cabinet.

Since it was formed in November 1992, the Vancouver Island Region table has agreed on a process, developed a vision statement for the year 2020, and each sector has defined its interests. It has to complete the much more difficult task of agreeing on a land use plan by November 1993 (originally August 1993!). The plan has to accord with the vision statement, accommodate sectoral interests as far as possible, and be sustainable (according to a draft land use charter proposed by CORE). It will be developed through preparation of a succession of scenarios. It looks as if the government, which set the deadline, has underestimated the time required for a consensus process to deal with such complex and contentious issues.

Of course, sustainable development is much more than the allocation of land uses. British Columbia confronts other pressures that make the transition to sustainability even more difficult:

- The economy depends heavily on primary resources and exports but has high labour costs. It faces a future of low growth, high unemployment and increasing government deficits, according to a report by the British Columbia Round Table on the Environment and the Economy.
- The population is growing faster in British Columbia than any other Canadian province, mostly due to immigration (two-thirds from within Canada, a third from outside). Demand for social services is high and rising, as the population ages and as numbers of two-income and single-parent families increase.
- Aboriginal peoples are rightly demanding a just resolution of their land claims, and the powers and resources needed to manage their own development. There is little recognition that the resources will come from places like Clayoquot Sound, and that the environments of such places are bound to change.

Debate on these and other issues is being led by the British Columbia Round Table on the Environment and the Economy. This advisory body consists of 24 people drawn from all walks of life, appointed by the provincial government to develop a provincial strategy for sustainability. The Round Table has produced a report towards such a strategy and is now developing selected elements of the strategy. These include a strategy for energy; an economic framework for sustainability; a strategy for formal and informal education; strategic directions for community sustainability; and reporting on sustainability.

Several other provincial strategies are being developed in BC. The Protected Areas strategy aims to double protected areas from 6 per cent to 12 per cent of the province by the 2000. The Biodiversity Conservation Strategy aims to fulfil the province's responsibilities under the UN Convention.

CORE liaises closely with these strategies and also with the national strategies (see below). But their relationships have not been well worked out or clearly expressed. The need for sustainable development in British Columbia is great, but the constituency ▶

Who runs the show?

The simplest measure of participation in a strategy is who runs it. The strategies described here illustrate three main styles of strategy making in Canada:

Government-led **In the case of BC's Protected Areas Strategy and Biodiversity Conservation Strategy and Canada's Green Plan, the government concerned consults widely but makes all the decisions.**

Advisory **BC's Strategy for Sustainability is being produced by an advisory body, the Round Table on the Environment and the Economy. Round Table members serve in their personal capacity, not as representatives of their interest group. The Round Table consults widely. The government is committed to treat its recommendations in a particular manner.**

Participatory **BC's Land Use Strategy and Canada's Projet de Société provide two different models of the participatory strategy.**

In the Land Use Strategy, an attempt is made to enable all interest groups who wish to participate to do so. Great care is given to combine closely related interest groups into a fair but manageable number of sectors; and to ensure that each sector is properly represented.

The Project de Société is run by a working group of governmental and non-governmental organizations. Many of the organizations are networks; and the Projet is thought of as partnership of networks. For logistical and financial reasons, the process does not include all interest groups; but there is no clear procedure for selecting interest groups. Also there is no clear relationship with governments, who are not committed to respond in any fashion. ■

is tiny. To make it grow, a close bond is needed between the broad analyses and the nitty-gritty negotiations of CORE's Land Use Strategy and local strategies.

National strategies

In addition, not one but two national strategies are under way. The Green Plan, an environmental strategy for the federal government, was released in December 1991. Eighty initiatives and programmes are being implemented – on toxic substances, waste reduction, sustainable agriculture, national parks, new technologies for energy efficiency, reduction of ozone depletion, assessment, among others.

In British Columbia, a strategy for management of the Fraser River, the province's largest river basin, is being developed. Two 'model forests' have been designated – one in the Clayoquot Sound area – to research and test sustainable systems of forest management.

The Plan was prepared through the federal government's budget planning process, using the existing committee structure, from the Cabinet Committee on the Environment down to a management team within the Department of the Environment.

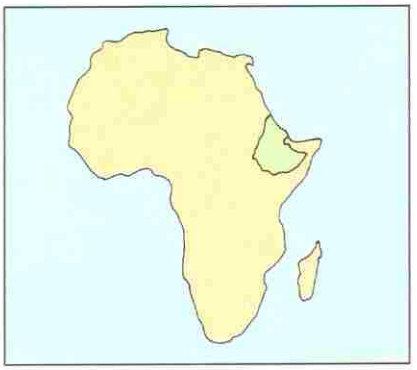
Richard Smith, Director General of Operations in Environment Canada commented on some of the costs and benefits of such a process. "For people delivering programmes within the Green Plan, ownership is high, but in other agencies it is low. Although we consulted widely, the process was not open enough, there was not enough time, and participation was limited".

The plan did not produce any changes in sectoral policies. But, says Smith, "we are committed to a full policy review of all agencies as part of Green Plan implementation". And the Green Plan's targets and progress reports have been "a real catalyst".

Canada's other national strategy is the Projet de Société, inspired by Canada's former Environment Minister, Jean Charest. He recognized that the transition to sustainability cannot be achieved by governments alone but must engage the whole of society, with new institutional forms.

Intended as Canada's sustainable development strategy, the Projet began in November 1992 and is still in the phase of process design. So far, it has had little impact on British Columbia, most of its energy coming from the Toronto-Ottawa-Montreal triangle. Designing and animating a network that engages Canadians right across the country – over the years that all strategies require to be effective – is a huge and perhaps impossible task. However, Canada needs a framework and focus for its efforts toward sustainability. Perhaps, if the Projet is strongly linked with provincial and local strategies, it will meet this need. ■

Robert Prescott-Allen is Chairman of the Working Group on Strategies for Sustainability of the IUCN Commission on Environmental Strategy and Planning. He was, most recently, Director of the Clayoquot Sound Development Strategy.



Ethiopia has a long recorded history. Indeed it has one of the longest histories of independent and cultural continuity – broken only by the incomplete colonization by Fascist Italy in 1936–41.

But its history since its long isolation was broken with the Second World War has been disastrous for its environment, and the present efforts to formulate a conservation strategy are badly overdue.

The Ethiopian environment was eminently suited for isolation. The usually good rainfall, the rich volcanic soils of the plateaux, the long history of crop cultivation and animal production, and the wide range of environmental conditions made it possible to produce a big range of food items, spices and raw materials. Even being cut off from the sea did not deny it salt, since rock salt is mined in several places inland.

All this was perched on highlands. The Arab from the hot and dry surrounding lowlands depended on camels for transport and attack which, on the rough highlands were no match for the Ethiopian horses, mules and donkeys.

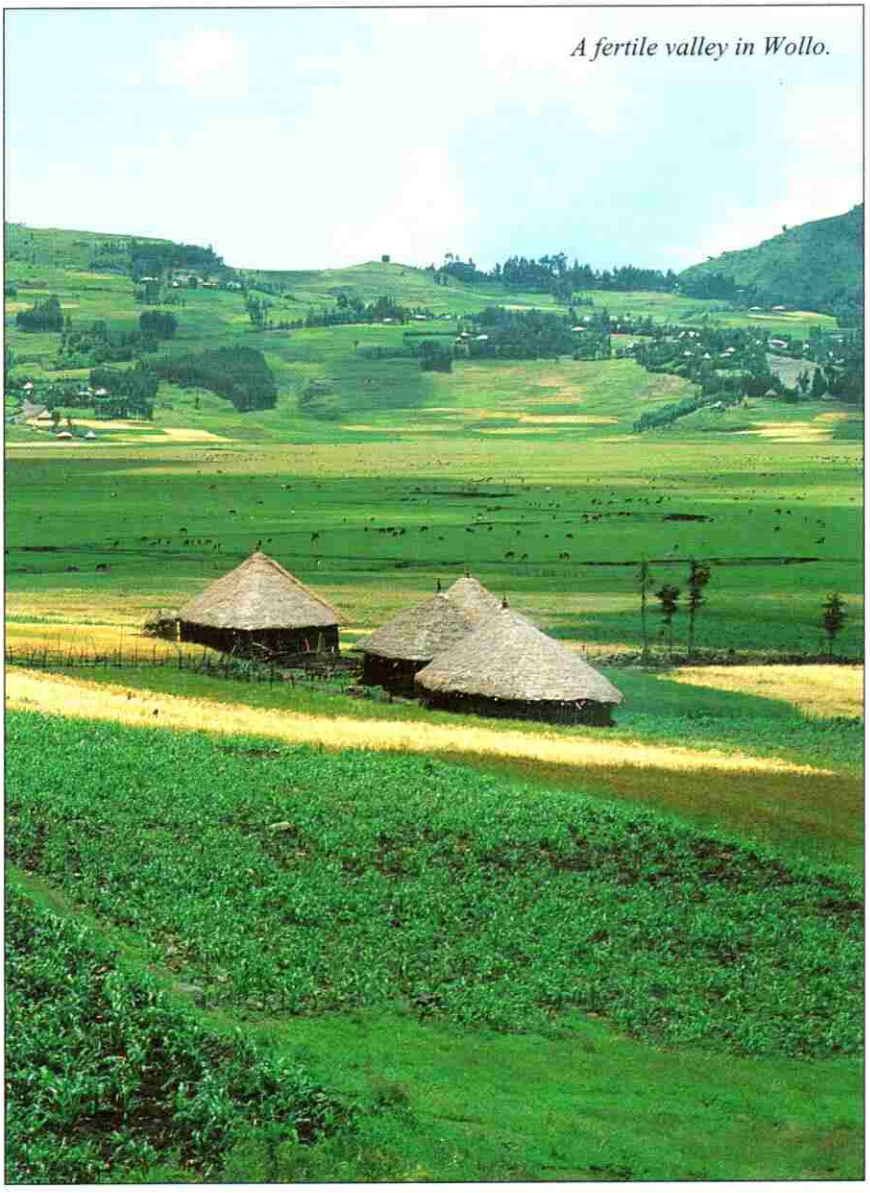
Culturally, the Ethiopian highlands were similar to Southern Arabia. Ethiopians were mostly Christian, with smaller but growing Muslim communities living in harmony. The lure of a newer, more universalist culture did not therefore pave the way for outsiders to enter. Instead Ethiopia shut its doors to the world and managed to keep them shut for more than a millennium.

But this fence of isolation was suddenly shattered with world war. The archaic feudal system failed to come to terms with the modern world. Instead of becoming more participatory it became more autocratic and more centralized. In the process, it steadily destroyed the traditional systems of managing production and caring for the environment.

The myriads of discordant relationships inevitably resulted in a reduction in productivity, in the degradation of the environment, in the lowering of the quality of life, in famines and civil war. Ethiopia's links with its long history were weakened, and it became a new country with new problems, similar to

Out of civil war, a conservation dynamo

In the chaos of civil war the conservation planners in Ethiopia decided to be part of the struggle for a new order. *Tewolde Berhan Egziabher* **reports from Addis Ababa.**



A fertile valley in Wollo.

NEIL COOPER/PANOS

those brought about by colonialism.

These crises were exacerbated by a military rule which was created by the vacuum left when the totalitarian feudal system collapsed.

Failing and at the end of its wits, the Military Regime became receptive in its final hours to new ideas. Some of its members may even have started to question the dogma of militarization under the banner of Socialism. In 1989 it asked IUCN to help launch a National Conservation Strategy, and the project was launched in 1991.

The original intention was to create a document which would distil information on the environmental state of the country, the elements of a policy for sustainable use of renewable natural resources, an institutional framework for carrying out the policy and elements of the legislation needed. In reality the conditions for such study were absent.

Within months, civil war engulfed the country. The government collapsed and a transitional coalition took over. The NCS consciously decided to become actively involved in the changes taking place. It became a process which tried to fulfil its mandate, not just as an external observer, but by actively helping shape the changes taking place.

As soon as peace came, it started creating regional task forces to compile information, ideas and plans from the ground up, in order to arrive at a national synthesis. Task forces were also set up to deal with sectoral issues in the same way.

The NCS helped shape events by participating in preparing the country report for the Earth Summit, negotiating for the Convention on Biodiversity and the follow-up to UNCED and the signing of the treaty. It joined in discussions to help plan the role of the newly created Ministry of Natural Resources, Development and Environmental Protection and many other matters touching on environment and development.

At the end, the sectoral and regional compilations will be put together, the deficiencies of one approach being compensated by the strengths of the other. This will result in regional sets of assessments, strategies and legislation as well as federal ones for the whole country.

This process will improve the planning and execution of developmental and environmental programmes and projects. These in turn will improve the information base of the National Strategy which will have to be institutionalized, as it cannot continue indefinitely as a project, and periodically revised.

In this way, planning, execution, policy, institutional framework, legislation and developmental and environmental programmes and projects should continue inter-acting dynamically and improving the situation each for the other. ■

Tewolde Berhan Egziabher is Co-ordinator of the National Conservation Strategy in Ethiopia.

Business and the environment

Big business, particularly in the industrial North, is trying to change the ways by which it effects the environment. As in any big, slow, complex change, there are various reasons for this effort.

'Green consumerism' waxes and wanes, but it keeps getting more sophisticated and applying more pressure. The media has been digging deeper into business sins against the environment and uncovering more. Laws in many countries have been getting tougher.

Governments have also been experimenting with 'economic instruments', such as pollution taxes and tradable permits, which reward ever-cleaner companies. Banks, worried about liabilities, are more willing to lend to clean companies. Insurance companies are also, for liability reasons, becoming more eco-sensitive. Finally, many business people actually do worry about their own personal responsibility for the state of their children's world.

But how to change? In 1990, Maurice Strong, secretary-general of the 1992 UN Conference on Environment and Development (UNCED) in Rio, asked Swiss industrialist Stephan Schmidheiny to be his adviser on business and industry. Schmidheiny, who had inherited an asbestos cement empire and either got the asbestos out or got out of the asbestos, believes that one can be environmentally responsible and still make money. He asked about 50 other chief executives from around the world to join him in the 'Business Council for Sustainable Development' (BCSD) to prepare a report from business to Rio.

At first such a report seemed hopeless; there was too much scientific, political and financial uncertainty about. "Call for more research and have done with it!", advised one member. But they persevered, began to see the inherent logic in the notion of 'sustainable development', and eventually produced a book which has since sold over 100,000 copies and been published in 10 languages.[1]

The foundation of the message has to do with 'eco-efficiency', an expression coined by the BCSD and taken to mean "producing increasing added value, while reducing material and energy use and minimizing pollution throughout the product life cycle sufficiently to sustain resources for future generations".

There are obviously a great many things that companies can do on their own to be more eco-efficient and either profit from the increased efficiency, because they are saving energy and resources, or break even, because the money spent changing energy and resources balances the money saved. Companies have been very slow to the possibilities of change for their own good.

But in societies where natural resources are relatively under-valued, and where there is a relatively low, if any, charge for dumping wastes into the atmosphere – which is virtually all societies – then it will pay most businesses to continue to be inefficient in their use of resources, and natural sinks remain the most cost-efficient storehouses for pollution.

Business is different from you and me. The infamous 'bottom line' really does control decisions. If a business follows a path which makes it less competitive, or less profitable, for long enough, then it obviously ceases to be a business; it becomes an ex-business, a bankrupt business. So the bottom line remains both business's most important reality, and the most oft-used excuse on the part of business executives unwilling to change.

All of this is by way of saying that business cannot change significantly until the greater society in which it operates changes, until people are actually willing – and actually demand to be allowed – to pay prices which reflect environmental realities. If an electrical battery will emit mercury into the biosphere upon disposal, then its price must increase to reflect either the cost of repairing or the cost of preventing that damage. This is 'full cost pricing' or the 'polluter pays principle'.

Many environmentalists, wanting to see business suffer appropriate to its 'sins', object to the polluter pays principle on the grounds that "increased prices are just passed along to the consumer". But that is precisely the point. Consumers then buy fewer, of whatever, and business looks for an improvement, a substitute, a more efficient bit of kit.

This is why the BCSD, in its first substantive chapter, called for market prices reflecting the full environmental costs of consumption and production. This would change everything, including the way dirtier companies are judged on stock markets, by banks and by insurers. It can be accomplished by regulations, where necessary, but it can also be accomplished by new environmental taxes and charges and tradable permits. These could raise revenue, allowing the tax burden to be decreased on 'good' things like income and employment.

These 'economic instruments' are all the rage these days, occupying countless reports and meetings between business types and government bodies. The bodies that are conspicuous by their absence in such forums (with a few notable exceptions) are the environmental bodies. Many still regard business as the cause of all the problems, while at the same time refusing to engage and negotiate with such villains. This means that the governments do the negotiating, and this is dangerous.

It is a time for partnership. No one can get the job done alone. Business is too bottom-line oriented. Government lacks motivation for change. Environmentalists are too otherworldly. Business is establishing the bodies to act as partners; national BCSDs are springing up around the developing world and in Eastern Europe; the International Chamber of Commerce is working on sustainability issues; the US has a powerful new President's Council on Sustainable Development.

Environmentalists will have to work hard, study hard, to catch up with all of this and play an appropriate role. Otherwise they will be left protesting at the factory gates while the rules are changed – for better or for worse – all around them. ■

Lloyd Timberlake is External Affairs Director of IIED.

[1]Schmidheiny, S et al. *Changing Course: a Global Business Perspective on Development and the Environment.* MIT Press, 1992.

The 6 'biggies'

The six developing nations with the largest populations in mid-1993 are China with 1.18 billion people, India 897 million, Indonesia 188 million, Brazil 152 million, Pakistan 122 million and Bangladesh 114 million. Together they amount to 2.65 billion people, or 62 per cent of the developing world's population. If we can succeed with expanded population planning programmes in these nations, we shall have gone far to defusing the population bomb.

How are the six "biggies" shaping up? It's a mixed picture.

China's fertility rate has shown little decline for several years. The Government has had to revise its year 2000 projection from 1.2 billion to 1.29 billion people, a difference equivalent to an 'extra Mexico'. Even the new target will be difficult to achieve since there are now 123 million women, almost 20 million more than five years ago, in the prime child-bearing age of 23-29 years.

The problem ultimately stems from over-rapid population growth in past decades while there was still time to pre-empt the problem. Other countries, take note.

India's family planning efforts have also stalled somewhat in recent years, and the country is stuck with the fact that even if it attains the two-child family as early as 2015, population growth will not level out before the total reaches 1.9 billion.

There is better news from India's Kerala State. Its population density matches that of Bangladesh, and per-capita income is among the lowest in the country. But its quality of life is unusually high. Life expectancy is one quarter above the national average, infant mortality less than half, and literacy almost twice. Female education brings many opportunities for women apart from child bearing, and their average age at marriage is the nation's highest. And the fertility rate is down to 2.3, hardly above replacement level and contrasting strongly with India's average of 3.9. All this stems primarily from Kerala's egalitarian system, expressed through long-term social development. Other states of India, take note.

Indonesia has made some splendid progress with family planning. The population growth rate has plunged from 2.3 per cent per year in the mid-1960s to 1.97 per cent in the mid-1980s and to 1.7 per cent today. Women now have an average of only three children, one less than just eight years ago, and in Java and Bali only 2.7 children. If unwanted births could be eliminated, the fertility rate would drop to 2.5 children. Almost all married women know of at least one modern form of contraception, and half are using it. Other nations, take note.

Brazil has achieved an annual population growth rate of only 1.5 per cent and a fertility rate of 2.6, well below Latin America's averages of 1.9 and 3.2. Regrettably the Government views the present family size as "satisfactory", and family planning programmes receive no government support at all. Fewer than three married women in five use a modern form of contraception. Although abortion is illegal, there are an estimated two million a year, many of them conducted with appalling injury to women.

With a per-capita GNP of almost $3,000, easily the highest of Latin America's large nations, Brazil's population record should be far better. Part of the problem may well lie with the gulf between poverty and affluence: the poorest fifth of Brazilians enjoy only about one-thirtieth the income of the richest fifth. As a probable result, child mortality remains the fourth highest in Latin America. While Brazil could be a leader in population planning, it is falling far short – with adverse repercussions for its geopolitical ambitions. Other wanna-be powers, take note.

Pakistan is a dismal news nation. It contains 2 per cent of the world's population on 0.67 per cent of the world's land, and is projected to account for 4 per cent of global population growth during the next 10 years. Yet it already overloads the basis of its food production capacity in the form of the largest irrigation network worldwide. A full 90 per cent of food production depends upon irrigation, yet farmers already divert 76 per cent of the flows of the River Indus, and 89 per cent of recharge of groundwater stocks.

Pakistan's population is projected to grow to 275 million people by 2025, a 125-per cent increase – an unpromising prospect given the nation's current carrying-capacity problems. The current growth rate is 3.1 per cent per year, one third higher than the average for Southern Asia. Family size is 6.7 children, whereas the desired size is four children. A mere 9 per cent of married women use a modern form of contraception. Other nations with continuing rapid growth in numbers, take notable note.

Finally, Bangladesh, and a moderately good news nation. With the largest population of the world's 20 poorest nations, it is the only one where there is a solid start on fertility decline. In 1975 the family size was seven children. today it is fewer than five – a specially steep fall for a nation where the per-capita GNP is a mere $220.

Around half of households in this, the most rural nation anywhere, are functionally landless with less than 0.2 of a hectare per person. Infant mortality is higher even than Pakistan's and women are denied much social status. So what is working the birth-control chemistry? It seems to be the speedy spread of family-planning facilities. Contraceptive use has soared from 3 per cent in 1971 to 40 per cent in 1991. Take note, those nations that insist that family planning has only a minor role to play in population planning. ■

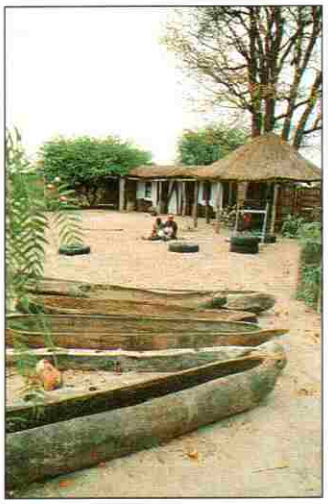
Norman Myers's latest book, Ultimate Security: The Environmental Basis of Political Stability, *has just been published by W W Norton, New York and London.*

Associates' News

Okavango reprieved

The world's largest inland delta and one of Africa's most vital ecosystems has been temporarily saved from a potentially devastating water development project by the decision of the Botswana Government to consider a less costly and more effective alternative.

The decision to 'suspend' the controversial Okavango Delta dredging scheme followed a recommendation by the World Conservation Union (IUCN) to cancel the project because of its environmental risks and the negative impact on the local population.



The $50-million project, developed by an Australian engineering corporation, involved dredging 42 kilometres of waterways at the southern end of the Okavango to increase the volume of water flowing out of the delta. This would have been stored in two reservoirs each over 100 kilometres long.

The intention was to increase food production, and to improve water supplies for tourists and for a mining complex operated by De Beers in partnership with the government. But the IUCN review team found that the project would have worsened the living conditions for the majority of the village people by reducing the productivity of the most important flood recession and grazing land. Some 50,000 people and 110,000 head of cattle live on the fringes of the area.

The IUCN report concluded that the dredging scheme would not provide the water required and that alternative sources could be tapped for much less expense and less environmental impact. The Botswana Department of Water Affairs is expected to announce its final decision later this year.

The Okavango delta, a third the size of Switzerland, is one of nature's wonders. Africa's largest oasis, it is filled with an incredible richness of plant, human and animal life, including 350 species of birds, free-ranging buffalo, zebra, elephants, giraffes and antelopes.

■ *A Resource File on Water and Wetlands Management in Africa is available from IUCN Communications Division, 28 rue Mauverney, CH-1196 Gland, Switzerland. Tel: (4122) 999 0001, Fax: (4122) 999 0002.*

Social marketing

The Association for Voluntary Surgical Contraception and the SOMARC III project of The Futures Group are collaborating on a five-year project that will use social marketing techniques to promote long-term and permanent methods of contraception.

Consumer research will help to identify barriers that prevent men and women from choosing long-term and permanent methods. The two agencies will test different models of marketing and referral systems for these methods in several countries.

AVSC and The Futures Group will also work to establish networks of service delivery sites that are committed to providing high quality family planning services. These sites will be identified by a symbol or "brand" name that consumers can easily recognize.

■ *Contact: AVSC, 79 Madison Avenue, New York, NY 10016.*

Helping Pakistan

The decision to cut off United States funds for Pakistan, announced by the US Agency for International Development in June, is likely to jeopardize the work of some Planet 21 associates in that country.

One of those affected is the Association for Voluntary Surgical Contraception (AVSC) which has been working with six non-governmental agencies and two private hospitals in Pakistan, focusing on the delivery of high-quality family planning services.

In September, Population Concern launched an emergency appeal for funds to help keep going some of the projects affected by the withdrawal of US funds. According to the British charity, the decision had already caused the closure of 155 family planning centres, 30 community-based distribution projects and four mobile service units.

Morale generally had been badly affected, especially in areas where the contraceptive use had been increased to as much as 40 per cent of the fertile couples, far in excess of the government's aim to reach 25 per cent of couples by the year 2000.

■ *Funds for the Pakistan emergency appeal should be sent to Population Concern, 231 Tottenham Court Road, London W1P 9AE, UK. Tel: (4471) 637 9582. Fax: (4471) 436 2143.*

State of the World Population

A slowdown in world population growth is a key requirement for reducing the massive and increasing flow of human migration across the world. This argument is made by the United Nations Population Fund (UNFPA) in its *State of World Population 1993 Report* entitled 'The individual and the world: population and development in the 1990s'.

An estimated 100 million people worldwide are now international migrants living outside their country of birth. Of these people, 17 million are refugees and another 20 million have fled violence, drought and environmental destruction. The report says that there are no figures on how many people are internally displaced within their own country by the same pressures.

Migration patterns are a "collective expression of millions of individual and family decisions". However, the magnitude of urban and international migration in recent years is also evidence of more disturbing trends, such as the expanding gap between rich and poor, rapid population growth, and increasing environmental degradation.

■ *Contact: UNFPA, 220 East 42nd Street, New York, NY 10017.*

IPPF's new Fund

The International Planned Parenthood Federation (IPPF) has set up a new Fund to provide grants to its national affiliates in areas of greatest need, on a competitive basis. The grants will be awarded according to the capacity of the family planning association (FPA) to expand, overall country needs, and the association's ability to achieve a demonstrable impact.

This Partnership Challenges Fund will supplement IPPF's existing funding mechanism and will operate with contributions from the Hewlett Foundation and the Governments of Australia and Sweden, and with renewed support from the United

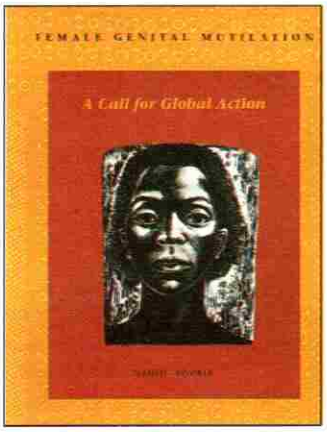
States Agency for International Development. These donors have contributed some $8 million to the Fund in the current year.

The Fund builds on the strategic planning processes begun under the Challenges of the 1990s Project and aims to help FPAs to respond flexibly to needs and to encourage them to measure and maximize the impact of their work.

The Fund is headed by Ms Kalimi Mworia, former Director of the Kenya FPA. IPPF regional bureaux and country-based project development staff will help FPAs to develop, monitor and evaluate partnership projects.

Female genital mutilation

Between 85 and 114 million girls and women, mostly in Africa, are genitally mutilated, and another 2 million girls are at risk of mutilation every year, according to a new report by the Population Council, *Female Genital Mutilation: A Call for Global Action.*



Written by Sudanese surgeon and women's health activist Nahid Toubia, the report gives a detailed description of the types of female genital mutilation (FGM) and the physical and emotional complications and long-term effects. It describes the cultural significance of FGM, stressing the difference between it and other forms of bodily alteration – that it is mainly performed on children, with or without their consent.

The report concludes with a 'Global Call to Action', pointing out that FGM contravenes several provisions of the Children's Rights Convention and the UN Convention to Eliminate All Forms of Discrimination Against Women, both of which have been ratified by many countries where FGM is prevalent.

Admitting that some of the defensiveness and anger expressed by Africans is caused by the tone of Western attacks on the practice, Dr Toubia calls for wider dissemination of the effects of FGM, for all international and national agencies concerned with public health to develop policy positions on the risks of FGM to the health and well-being of women and girls, and for programmes dealing with women's and children's health and family planning to include information on the harmful effects of FGM.

■ *Contact: The Population Council, One Dag Hammarskjold Plaza, New York, NY 10017.*

Population aid stagnates

There has been no significant increase in population assistance in the past two decades when calculated in relation to the population growth of developing countries. Despite increased contributions from a few donor countries with strong commitment to population assistance, the poor performance of other donors and current weaknesses in the global economy could jeopardize future increases in funding, at least in the short term.

This is the negative picture presented by Population Action International (PAI) in a new report on *Global Population Assistance: A Report Card on the Major Donor Countries.* The laggards – France, Italy, Austria, Belgium, Spain, Ireland and, to a lesser extent, Australia and Switzerland – provide no significant assistance or are well below the average of the major donors.

PAI cites continued political sensitivity to family planning, lack of professional population staff in donor agencies and doubts about the effectiveness and absorptive capacity of family planning institutions as reasons for the general failure to live up to the commitment to 4 per cent of development assistance made at the UNFPA Amsterdam Forum in 1989. Outside Britain and the United States, advocacy has been weak and support from political leaders lacking.

On a more positive note, the report finds that new awareness-raising initiatives in several countries are promising and concerns about migration and the environment have drawn attention to population pressure.

■ *Contact: Population Action International, 1120 19th Street NW, Suite 550, Washington DC 20036.*

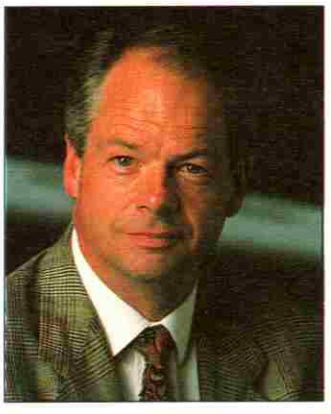
New head for WWF

After 17 years as Director-General of the World Wide Fund for Nature (WWF), Mr Charles de Haes stepped down in October and is succeeded by Dr Claude Martin, former Deputy Director-General.

WWF is the world's largest conservation organization with more than five million regular supporters and conservation activities in more than 90 countries.

Dr Martin, 47, a Swiss, becomes only the third Director- General of the organization after Mr de Haes and Dr Fritz Vollmar. Deputy Director since 1990, he has overseen WWF's field, policy education and communication activities. In the preceding decade he served as Director and Chief Executive of WWF Switzerland and played a key role in WWF International's programme.

In the 1970s he carried out ecological studies while living in Central India and later served as a National Park Director in West Africa. He has a special interest in forest conservation.



Commenting on his appointment, Dr Martin told *People & the Planet:* "Over the years, WWF has learned that building partnerships with local people is a key to meeting conservation activities. The successful integration of their needs, interests and ambitions is a crucial, though not always easy, task."

Teenage needs

Young people's family planning needs must be tackled head-on if the distress of unplanned pregnancy and adolescent abortion is to be addressed, according to a special study of adolescent sexuality included in IPPF's *Annual Report 1992-93.* The report indicates that many of the world's 500 million 15-19 year-olds are sexually active, but very few of them have access to good quality family planning services, because of adults' reluctance to accept that young people are sexually active, and because of the bias of many family planning programmes towards married couples.

The study suggests that many adults believe that young people will be encouraged to be "promiscuous" if they are given information about sexuality and contraception. But this moratorium only promotes ignorance, with predictable and tragic consequences. One study in Nigeria found abortion complications accounted for 72 per cent of all deaths among women under the age of 19 years. In one Nigerian secondary school a third of all the girls had had abortions. The USA has the highest rate of adolescent pregnancy in the West with a total of more than 600,000 unintended pregnancies a year, two- thirds of which end in abortion.

In many countries, industrialized and developing, between 5 and 10 per cent of all 15- to 19-year-olds become pregnant each year, and in some parts of Africa, over 20 per cent do. The numbers of adolescents worldwide will continue to grow for at least another century. Many Family ▶

Planning Associations have started youth programmes, and IPPF is the co-ordinating agency of the peer education Youth to Youth project.

■ *Contact: IPPF Distribution Unit, Regent's College, Inner Circle, Regent's Park, London NW1 4NS, UK. Fax: (4471) 487 7950.*

PRB president

Peter J. Donaldson is to be the new President of the Population Reference Bureau in Washington DC. He joins PRB in January from the Population Council where he has been senior representative for South and East Asia.

A widely experienced academic and administrator, Dr Donaldson worked with the US National Academy of Sciences and with Family Health International before joining the Population Council. His most recent book *Nature Against Us: the United States and the World Population Crisis*, published in 1990, explored the tensions and conflicts which marked the origin and rise of USAID's global family planning assistance from 1965-80.

Dr Donaldson succeeds Barbara Boyle Torrey, who has moved to the National Academy of Sciences to head the Commission on Behavioral and Social Sciences and Education.

Pathfinding in Indonesia

Pathfinder International is about to launch its most extensive national family planning programme, in Indonesia, at a cost expected to top $50 million over the next five years.

The aim of this USAID-funded initiative is to complement the government's programme by strengthening the capacity of the public and non-governmental sector to deliver family planning services. It is designed to increase expertise in delivering long-acting and permanent methods, for which there is a significant unmet need. It will operate in seven of the most populous provinces and will emphasize quality of care, the reduction of medical barriers and user need.

The main implementing agency is the National Family Planning Board (BKKBN). Pathfinder will also support other well established family planning organizations including the IPPF affiliate (IPPA), the Indonesian Association for Secure Contraception (PKMI) and the Indonesian Public Health Association (IAKMI). IAKMI will identify local family planning experts who will then assist other NGOs to improve their family planning work.

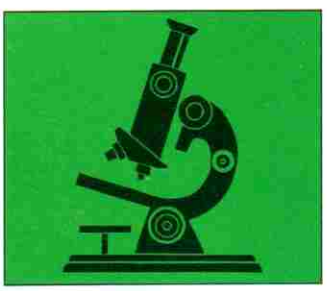
"The most exciting and challenging element of this programme", according to Dr Turkiz Gokgol, Pathfinder's Regional Vice President, "is the opportunity to initiate performance-based disbursement of funds." This will allow more energy to be focused on quality and impact rather than on close grantee monitoring.

■ *Contact: Pathfinder International, 9 Galen Street, Suite 217, Watertown, MA 02172-4501 USA. Fax: 617 924 3833. Tel: 617 924 7200.*

Curbing STDs

As many as one in every 10 people of reproductive age – or more than 250 million worldwide – will contract a sexually transmitted disease (STD) this year, according to a new report from the Johns Hopkins School of Public Health.

Syphilis, gonorrhoea,



chlamydia, chancroid, and others STDs cause suffering and debilitate hundreds of millions of people. Moreover, people exposed to the AIDS-causing human immunodeficiency virus (HIV) through sex are up to nine times more likely to become infected if they already have another STD, according to the latest issue of *Population Reports*, 'Controlling Sexually Transmitted Diseases', published the University's Center for Communications Programs (JHU/CCP).

Treatment and prevention programmes can slow the spread of STDs, the report says. In Zambia, for example, the number of new STD cases in the University Teaching Hospital in Lusaka dropped from 18,000 to 5,000 in six years after the launch of a national STD programme.

If primary health centres are to help treat STDs, they will need more microscopes or lab tests for diagnosis and a steady supply of drugs for treatment. To help in diagnosis, WHO has developed a step-by-step guide based on groups of symptoms. A wallchart on how to use this approach accompanies the report.

■ *Contact: Population Information Program, Johns Hopkins School of Public Health, 527 St Paul Place, Baltimore, Maryland 21202. Fax: (410) 659 6266.*

Indigenous peoples

Indigenous communities are at almost hopeless odds with conventional concepts of sustainable development. They battle for land rights, lose their markets for products gathered sustainably in the wild and see their abundant traditional knowledge of natural resource management diffused into obscure scientific treatises.

These were some of the findings presented, through case studies, at a Workshop on Indigenous Peoples and Strategies for Sustainability convened in May by the World Conservation Union (IUCN) in collaboration with Indigenous Survival International.

Many participants were themselves from indigenous communities – Inuit, Maori, Amazonians and Aborigines. There was remarkable consistency in the descriptions they gave of the obstacles they face. Despite attempts to avert disaster, their plight in many parts of the world is steadily worsening, due to population pressure, impoverishment and misguided political, legal and institutional manoeuvres. Unequal partners with development planners, unable to communicate their dynamic relationships with nature and the richness of their contributions to sustainability, indigenous people represent a vast unexploited potential in danger of extinction.

The Workshop was a first attempt to get to grips with these issues by a Task Force which will continue its work by publishing a volume of case studies and a Guide to the involvement of indigenous people in strategies for sustainable development.

Population puzzle

Rapid population growth in the Middle East threatens to outpace economic growth, strain resources, and upset the delicate ethnic balance in this politically volatile region, according to a new report by the Population Reference Bureau.

"Nearly all signs point to continued and rapid expansion of the population of the Middle East for the next 30 to 40 years" according to Abdel Rahim Omran and Farzaneh Roudi, authors of ***The Middle East Population Puzzle***. The population of 265 million is expected to double within 30 years.

There are signs, however, that the region's fertility may decline in the future. The education of women has increased substantially at the primary level, and more governments are allowing, even promoting, family planning, though usage is quite low in most countries.

For example, Yemen wants to achieve a 6-child family average by 2000 (down from a 7.5 child average today), while Egypt's goal is a 3-child average by 2000. Fertility has already fallen substantially in Egypt, Lebanon and Turkey.

■ *Contact PRB at 1875 Connecticut Ave N.W. Suite 520, Washington D.C. 20009, or telephone (1-202) 483 1100 for copies of the report, priced at $8.*

FILMS

Listing the world's best work

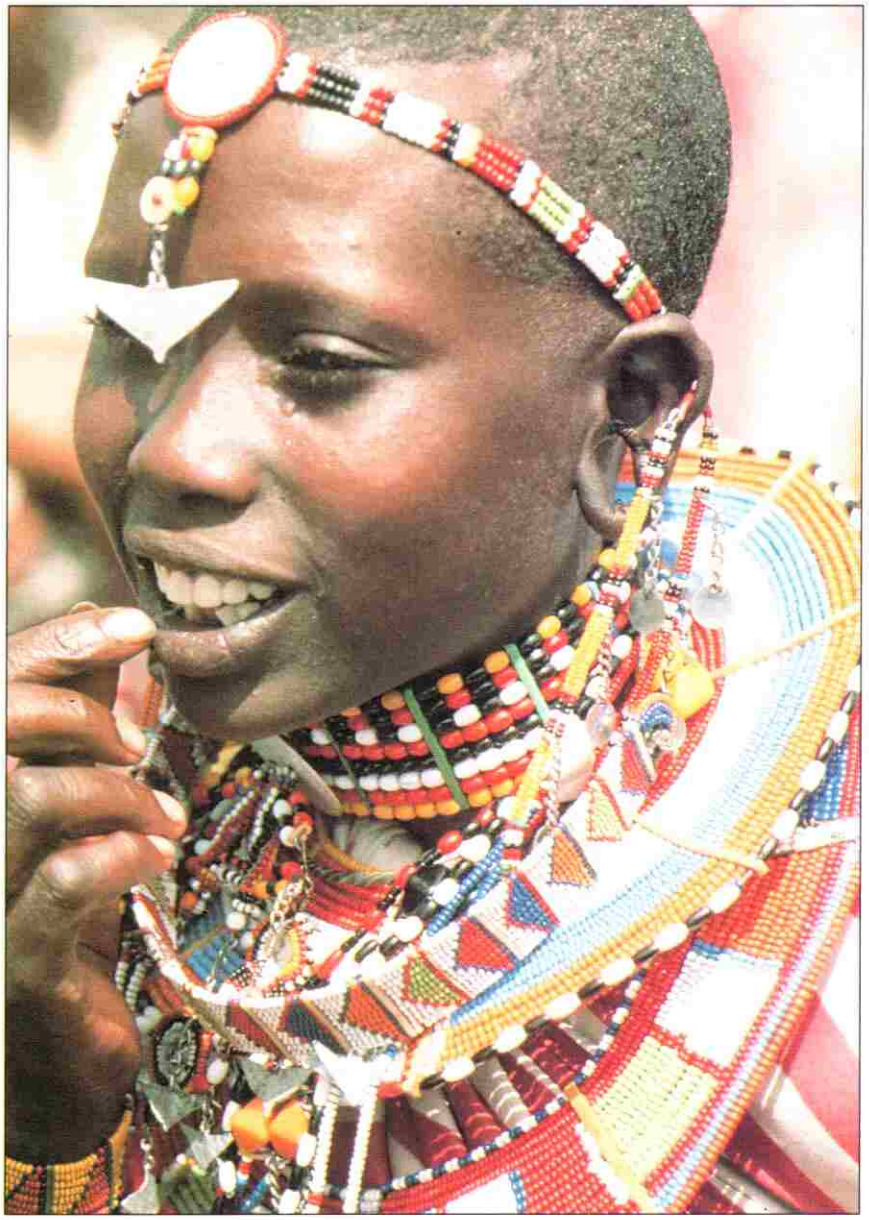
TVE's fifth, biggest and most ambitious distribution catalogue, *Moving Pictures 5*, is now available. Building on the success of last year's Earth Summit Catalogue – which led to orders for more than 11,000 cassettes from TV stations and non-governmental organizations (NGOs) in over 140 countries – *Moving Pictures 5* includes details of 115 new film titles on environment, population, development, health and human rights issues.

While the principle aim of *Moving Pictures 5* – as with past catalogues – is to enable broadcasters and NGOs in the developing world to screen some of the best environmental films around, many of the titles are also available for NGO use in the developed world.

A major innovation in the new catalogue is the selection of some of the best films on indigenous peoples promoting the aims of the UN Year of Indigenous Peoples. Highlights from this selection of 20 films range from Melissa Llewellyn-Davis' milestone documentary on the Masai, *Memories and Dreams* (a still from the film is reproduced here), to the heart-wrenching *Wiping the Tears of Seven Generations* made by the Lakota Indians themselves and telling the story of the US Government's brutal campaign to deprive the Lakota of their indigenous lands.

Alongside some of the best films from Granada Television's landmark *Disappearing World* series are more unusual approaches – such as Brazilian independent director Cesar Paes' award-winning *Songs and Tears of Nature*, contrasting the Arctic Sami people and the Fulni-o of north Brazil.

Other sections in the catalogue include drama, animation, news items and short films, education and agency films, as well as a library of over 100 titles still available from past *Moving Pictures* catalogues. For a copy, please contact TVE's Distribution and Training Centre at the address below.



MELISSA LLEWELYN DAVIES

Moving Pictures

Also hot off the presses are two new editions of the *Moving Pictures* Bulletin – TVE's issue-based guide to new programmes on environment and development issues.

The first focuses on the environment and the fast-changing media scene in India – and how television and the ubiquitous video player can be used to get across environmental messages. Robert Lamb, TVE's Director, describes the impact of the new, satellite station Star TV on the august state broadcasting network, Doordarshan. Darryl d'Monte, Bombay editor of *The Times of India*, tells the story of the successful battle to save Silent Valley, which hinged on the fate of the obscure lion-tailed macaque. And Nasreen Rehman traces the history of the Bombay film industry – whose *masala* of popular music, folklore and mega filmstars has always, she claims, been the surest way to reach mass audiences with environment and development themes.

The second bulletin is intended to mark the International Children's Day of Broadcasting (ICDB) on December 12 each year. First launched two years ago, ICDB has been enthusiastically taken up by TV stations around the world. In 1992 more than 200 television and radio stations in over 80 countries took part, making broadcast history. Produced as a resource for broadcasters and NGOs around the world, the Bulletin includes reviews of 60 programmes – both about children and for children, reviewed by children themselves. ■

■ Television for the Environment
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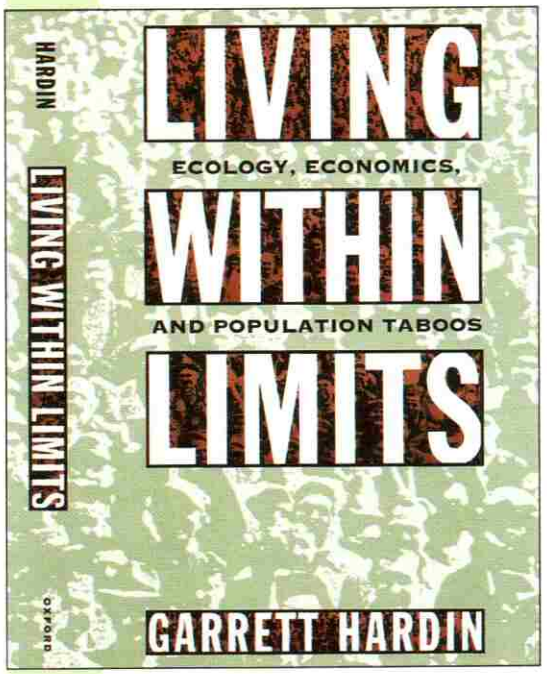
BOOKS

Soft target

Living Within Limits: Ecology, Economics, and Population Taboos
Garrett Hardin
Oxford University Press, 1993. $25



The curmudgeon-ecologist Garrett Hardin is at it again. The newest book by the man who championed such attention-grabbing population theories as "tragedy of the commons" and "lifeboat ethics" now takes to task all the soft-headed family planners who mix maternal and child health up with pure birth control. What exactly does one call a man who thinks increased child survival rates in Africa are "disastrous"?

But in the brutal logic of Hardin's contrarian arguments, even a "soft head" might learn a lesson or two. As an ecologist, his frame of reference is much broader and longer than that typically employed by project-oriented development economists.

If, as he argues, compound rates of interest can only be offered when bank failures and market crashes are eventually sure to check a savings account's inexorable run up towards infinity, a parallel analogy awaits any country with a long-term positive rate of population growth. If an economic bust is considered a "corrective" among economists, so too are epidemics and starvation among ecologists. If development is really to be sustained, he says, we earthlings had better start preparing our spaceships soon.

Expanding on his "tragedy of the commons" idea, Hardin rails against the widespread human and institutional practice of commonizing costs while privatizing profits. His search for harmful examples is relentless, taking him from paint polluters to factory closings to three child couples.

For all his logical argument, however, Hardin still overreaches in two important areas. His greatest fear, that fertility preferences are genetically determined and therefore the law of natural selection will select for high-parity individuals, is grossly misplaced. Since genetics is not his area of professional expertise, such an overstatement might charitably be ignored.

But not Hardin's excessively rigid definition of "carrying capacity", which he terms an ecological constant, never to be reconfigured. Technological change, he says, cannot increase it, but rather will only permit it to be overshot for longer periods of time by larger populations, leading inevitably to a more horrendous "corrective" event (read tragedy) sometime in the future.

Unsurprisingly, Hardin puts the earth's carrying capacity at well below the five billion mark. But this again is part of the author's charm – the way his tightly reasoned provocations make one fluster and bluster in new directions, and finally think straighter and clearer about our planet and its population.

Louis Werner

Fatal fly

And Then Forgot to Tell Us Why... A look at the campaign against River Blindness in West Africa
David Wigg. Foreword by Jimmy Carter
World Bank, Washington DC, 1993. Free of charge.

The title of this useful booklet, the first in a new series of World Bank Development Essays, is taken from a piece of doggerel by the American humorist Ogden Nash, the first line of which reads: "God in His wisdom made the fly..."

The fly in question is the blackfly which infects people with a parasite causing onchocerciasis, or river blindness, in Africa and Latin America. David Wigg tells the story of how this dreadful disease, which has brought sickness and blindness to some of the poorest people in the world, is now on the way to being defeated.

In 1987, WHO estimated that about 85 million people were at risk of infection worldwide, 18 million were infected, 1 million had sight problems and 350,000 were blind. The beginning of the end of river blindness was the World Bank decision in the 1970s to launch an international campaign, with WHO and the UN Development Programme, to attack the larval stage of the blackfly with airborne spraying in seven West African countries. This programme was already proving successful, with four more countries joining in 1986, when a new drug, ivermectin, was developed which, given orally once a year, safely kills the infant worms in the human bloodstream. In a further remarkable development, its manufacturer, Merck, decided to make the drug available in the developing world "for as long as needed to as many as need it".

The Onchocerciasis Control Programme "is now a stunning success", writes David Wigg. River blindness has been virtually eliminated in the original seven-country area. By 1992, more than 30 million people were protected from the disease. About 1.5 million people who were seriously affected have fully recovered, and 150,000 have been saved from going blind. Around 25 million hectares of abandoned arable land in formerly blighted river valleys are opening up again for new settlement.

Wigg tells the story journalistically, in human terms, through the words of the individuals affected and the scientists and doctors in the field. "This may be seen, when the histories are written, as one of the 20th century's great medical triumphs." A success story out of Africa, which is badly needed, and well told.

Jeremy Hamand

Bio perspective

Backlash...A biologist looks at problems of population and the environment
Alan S. Parkes (with the assistance of Frances Dennis)
Parkes Foundation, University Press, Cambridge. £16

It is a significant measure of the writer's ability to select essential issues that the book begun by Sir Alan Parkes in 1979 and then shelved for seven years in favour of his two-volume autobiography, retains so much of value and appeal for the concerned and intelligent layman.

Taking two bites at the *Backlash* cherry certainly made things difficult for Frances Dennis, to whom Sir Alan turned for help in fact finding and who actually completed his manuscript for publication. She has carried out this difficult task superbly. Any slight unevenness which may result from use in places of out-of-date data fails to detract from the attractively written expression of this wise and distinguished biologist's unique perspective on the most pressing human problems of our time.

After demystifying population issues, the author moves on to discuss factors affecting human numbers such as war, famine and communicable diseases; biosocial issues; and consequences of man's increasing numbers and technologies. A final short section entitled "The Backlash of Sophistication" ends with Sir Alan Parkes speculating that it is possible man will destroy himself in a nuclear catastrophe so that life will have to evolve again, hopefully, he suggests, to a form "which relies on neither brawn nor brain".

Katherine Elliott